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ABSTRACT

For use by educational planners desiring to match occupational supply and demand data, this report contains conversion tables intended to provide a bridge between the system used to classify occupations in the Bureau of Labor Statistics' National/State Industry-Occupation Matrix System and the system used by the Office of Education to classify occupational instructional programs. This report updates the information contained in "Tomorrow's Manpower Needs" Supplement 3 by substituting 1970 census data (occupational codes) for the 1960 base used in the earlier study. The first section outlines the characteristics of four occupational and educational classification systems: the Bureau of Labor Statistics (BLS) National/State Matrix system occupational classification; the Bureau of Census occupational classification; Dictionary of Occupational Titles (DOT) classification and codes; and the Office of Education (OE) classification. The next section describes the conversion tables including the source of data, and the construction, interpretation, and limitations of the table. The bulk of the report is the two sets of tables: (1) the Conversion of National/State Matrix titles to the vocational education classification system; and (2) vocational educational instructional programs and related National/State Matrix titles. The first lists National/State Matrix titles (e.g., each subheading under "professional, technical, and kindred workers") and corresponding 1970 census code, vocational education system code and program title, and DOT code and title. The second table then converts Matrix titles to OE instructional program codes and titles (e.g., "agricultural and biological technicians, except health") to chemical technology in the technical education program area. (JH)

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Matching Occupational Classifications to Vocational Education Program Codes

Tomorrow's Manpower Needs
Supplement 3 (Revised)

U.S. Department of Labor
John T. Dunlop, Secretary
Bureau of Labor Statistics
Julius Shiskin, Commissioner
1975

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U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Preface

The manpower and educational legislation enacted during the last several decades has continuously underscored the need for manpower planning and information on current and projected occupational requirements. To help guide educators and manpower planners, the Bureau of Labor Statistics (BLS), in cooperation with the Manpower Administration, prepared *Tomorrow's Manpower Needs* (TMN), BLS Bulletin 1606 (1969). This four-volume report presented detailed national manpower projections by occupation and industry, together with a guide to their use in developing similar reports at the State and local levels. Since the procedures outlined require that local manpower analysts have the most recent and accurate national manpower information available, BLS has periodically revised and updated its data and refined its methods. The full series of publications is as follows:

Tomorrow's Manpower Needs:

Volume I	Developing Area Manpower Projections.
Volume II	National Trends and Outlook: Industry Employment and Occupational Structure.
Volume III	National Trends and Outlook: Occupational Employment.
Volume IV	The National Industry-Occupational Matrix and Other Manpower Data.
Supplement 1	Revised Projections of Construction Manpower Requirements (1970).
Supplement 2	New and Revised National Industry Projections to 1975 and Procedures for Adjusting Wage and Salary Employment to Total Employment (1970).
Volume IV Revised 1971	The National Industry-Occupational Matrix and Other Manpower Data, Bulletin 1737 (1972).
Research Report on Manpower Projection Methods, Bulletin 1769 (1973).	
Supplement 3	Matching Occupational Classifications to Vocational Education Program Codes (1973).
Supplement 4	Estimating Occupational Separations from the Labor Force for States (1974).

In an effort to further improve the base data and projection methodology for States and local areas, the BLS, in cooperation with the Manpower Administration and the individual State employment security agencies, has begun to develop the Occupational Employment Statistics Program (OES). The OES program consists of three elements—the Occupational Employment Survey, the National/State Industry-Occupation Matrix System (which will incorporate OES survey data), and a continuous program of research into methodological improvements in all aspects of the program. The previously informal program of research called Tomorrow's Manpower Needs (TMN) now becomes part of the broad OES program as the National/State Industry-Occupation Matrix System.

The following report updates the information contained in TMN Supplement 3 by substituting 1970 census data for the 1960 base used in the earlier study.

This report was prepared by David P. Evans and A. Russell Marshall in the Division of Manpower and Occupational Outlook, Office of Manpower Structures and Trends.

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Introduction

One of the most complex problems facing educational planners is how to use available occupational supply and demand data for the purpose of setting prudent planning priorities. In addition to the myriad factors which make interpretation of the data difficult, such as the occupational and geographic mobility of workers,[1] the educational planner is faced with occupational and educational classification systems which discourage a systematic matching of supply and demand data.[2]

In the course of meetings between staff members of the Bureau of Labor Statistics and vocational educators seeking to use BLS manpower data for planning purposes, it became clear that a link was needed between data published by the Bureau on projected employment by occupation and data published by the Department of Health, Education, and Welfare's Office of Education on enrollments in vocational programs. The difficulty of translating the occupational projections into specific curriculum needs apparently was hindering the efficient use of the projections for educational planning. The desire to alleviate this problem was the impetus for the original publication of this supplement. The change to projections based on the more detailed 1970 census data and subsequent requests from educators for an update of Supplement 3 made it advisable to issue this revised edition.

This report provides a bridge between the system used to classify occupations in the BLS matrix system and the system used by the Office of Education to classify instructional programs. The bridge, in the form of a conversion table, may enable educational planners to make better use of BLS manpower projections. For instance, planners may find it useful in translating the information State employment agencies provide to vocational educators as directed under the Reports and Analysis Letter No. 685 (May 15, 1970), "Annual Report on State and Area Occupational Requirements for Vocational Education."[3]

Unfortunately, the classification systems as they are presently constructed do not permit a clear-cut matching of categories on a one-to-one basis. Perhaps the fundamental barrier to a perfect matching of manpower projections and instructional programs is that the various classification systems were developed for different purposes. The vocational education instruction codes were created primarily to facilitate educational planning, to standardize terminology, and to simplify reporting of educational statistics. The instructional programs are composites of subject matter organized to assist the teaching of certain skills that often encompass a variety of jobs. On the other hand, the occupational classification schemes incorporated in manpower projections were designed primarily to enumerate jobs which require extensive formal or specialized training or in which large numbers of people are employed. In short, the problem is that the cluster of jobs in an instructional program frequently differs from the cluster of jobs under an occupational heading.

Since a one-to-one matching of the occupational categories cannot yet be achieved, vocational education and other training planners still lack suitable information for some occupations. However, the conversion table presented in this report should enable innovative planners to solve many of these matching problems. For example, those using the table could aggregate the various occupational titles and instructional programs at different levels of detail to achieve a better match between occupational demand and supply. To illustrate, the matrix titles *Electric power line and cable installers and repairers, Telephone installers and repairers*, and *Telephone line installers and repairers* could be aggregated to match the sum of the instructional programs "Lineman," "Communications," and "Industrial Electricity."

Moreover, since in many localities there is a large

[1] For a discussion of labor supply factors and a bibliography of publications concerning labor supply, see *Occupational Supply: Concepts and Sources of Data for Manpower Analysis*, Bull. 1816 (Bureau of Labor Statistics, 1974).

[2] With some success, national demand data have been combined with the available national training data in *Occupational Manpower and Training Needs*, Bull. 1824 (Bureau of Labor Statistics, 1974).

[3] One of the options open to the State employment security agency under RAL 685 is the use of BLS manpower projections developed as part of the National/State Matrix Program. Supply data from vocational education programs and other sources are required in the annual report.

difference between the supply of trained workers and the estimated occupational demand in specific occupations, a precise matching may not be required for judicious planning. In fact, *relative* measures of unmet need, that is, a *ranking* of the difference between supply and demand in each instructional program (or group of programs), may be a better method for setting planning priorities.[4]

[4] This approach has been suggested by many vocational education researchers. For example, see Robert C. Young, William V. Clive, and Benton E. Miles, *Vocational Education Planning: Manpower Priorities and Dollars* (Columbus, Ohio State University, Center for Vocational and Technical Education, 1972).

The conversion table is designed as only a temporary aid for those concerned with matching the various occupational classification systems. The final clarification of occupational classification systems awaits the completion of the *Standard Occupational Classification System* sponsored by the Office of Management and Budget.[5]

[5] The Office of Management and Budget is preparing a new occupational classification system such that each of the various agencies' classification systems will be comparable with the new system as well as with each of the other classifications.

Occupational and Educational Classification Systems

Inasmuch as an understanding of the various classification systems and their limitations is essential to the effective use of the conversion table contained in this report, the following sections outline the major characteristics of each system.

The BLS National/State Matrix System occupational classification

The occupational classification used in the BLS National/State Matrix System is based on the system used in the 1970 Census of Population. The BLS matrix and the Bureau of the Census both classify occupations into broad socioeconomic groups—professional and technical, clerical, operatives, etc., with residual categories for each socioeconomic group so that the sum of all categories will equal total employment.

Although the census and the BLS matrix occupational categories are virtually identical, they are arranged somewhat differently. For example, the matrix sums the two broad census groups Operatives, except Transport, and Transport Equipment Operatives into a single group entitled *Operatives*. Also, the occupational heading Drill Press Operatives appears in the intermediate group *Semiskilled Metalworking Operatives* in the BLS matrix scheme instead of in the intermediate group Precision Machine Operatives as it appears under the census scheme. For the convenience of the vocational education planner who wishes to use BLS manpower projections, the occupational categories in the conversion table of this report are listed in the BLS matrix format.

The BLS matrix uses a number of other sources to supplement data from the 1970 Census of Population when they are considered to be more reliable. The major supplemental sources are Federal regulatory and nonregulatory agencies, professional societies, and the U.S. Civil Service Commission.

The content of the occupational groups remains, however, virtually identical to those used in the census. For example, although the statistics on employment of physicians taken from the American Medical Association differ from the census data, the occupational listing is, with only minor differences, the same as that in the census category. Therefore, the conversion table in this report shows census categories as well as BLS matrix titles.

The Bureau of the Census occupational classification

The 1970 Census of Population made use of three types of questionnaires. One, distributed to 80 percent of the households within the country, contained a limited number of population and housing questions. The remaining 20 percent of the households, split into 5-percent and 15-percent samples, were asked additional questions regarding the social and economic characteristics of their members. Detailed questions dealing with occupation and industry of employment were included in both the 5-percent and 15-percent samples. These responses were classified into 441 occupational categories and cross-tabulated for 227 industrial categories.[6] The sum of these occupational or industrial categories equals total employment.

The 441 occupational categories are arranged into 12 major groups and identified by 3-digit and single-letter codes as follows:

N	and	001 to 195	Professional, technical, and kindred workers
		201 to 245	Managers and administrators, except farm
		260 to 285	Salesworkers
P, Q	and	301 to 395	Clerical and kindred workers
R, S	and	401 to 580	Craft and kindred workers
T	and	601 to 695	Operatives, except transport
U	and	701 to 715	Transport equipment operatives
V	and	740 to 785	Laborers, except farm

[6] The list of specific occupational categories is shown on pp. X-XIV of the *Alphabetical Index of Occupations and Industries*, (Bureau of the Census, 1971). The BLS National/State Matrix System utilizes 421 detailed occupational categories instead of 441 and 201 detailed industrial sectors instead of 221 because the census includes residual and allocated categories not included in the matrix.

W	and	801 to 802	Farmers and farm managers
		821 to 824	Farm laborers and farm labor supervisors
X, Y	and	901 to 965	Service workers, except private household
Z	and	980 to 984	Private household workers

The *Classified Index of Occupations and Industries*[7] presents the individual job titles for each category in the census classification system.

Dictionary of Occupational Titles (DOT) classification and codes

Nearly 22,000 occupations are defined in the *Dictionary of Occupational Titles*.[8] Each occupation in the DOT has a 6-digit code number to reflect the kind and level of work performed, and three additional digits may be assigned to further differentiate occupations.[9] The 6-digit code numbers are used primarily by State employment services for classifying applicants and job openings and for other operating purposes. They also may be used by educators for defining job duties, career ladders, and occupational skill and training requirements.

The first three digits of the DOT code arrange jobs according to some combination of work field, purpose, material, product, service, subject matter, generic term, and/or industry. The first digit arranges jobs into nine broad categories:

0, 1 Professional, technical, and managerial occupations
2 Clerical and sales occupations
3 Service occupations
4 Farming, fishery, forestry, and related occupations
5 Processing occupations
6 Machine trades occupations
7 Benchwork occupations
8 Structural work occupations
9 Miscellaneous occupations

These categories are divided into 84 2-digit divisions, and the divisions are divided into 603 separate 3-digit groups. Each additional digit adds greater specificity to the category. For example, the three digits of the code 201 indicate:

First digit:	Category 2 (clerical and sales occupations)
Second digit:	Division 20 (stenography, typing, filing, and related occupations)
Third digit:	Group 201 (secretaries)

The fourth, fifth, and sixth digits of the code numbers specify the worker functions in relation to data, people, and things. Each one of the job requirements is arranged in a hierarchy. Each job is identified with the highest appropriate relationship for each of the three job-requirement classifications. Together, the second three digits of the code number are designed to express the level of complexity at which the worker is required to function for each job.

The worker function relationships are:

Data (4th digit)	*People* (5th digit)	*Things* (6th digit)
0 synthesizing	0 mentoring	0 setting up
1 coordinating	1 negotiating	1 precision working
2 analyzing	2 instructing	2 operating-controlling
3 compiling	3 supervising	3 driving-operating
4 computing	4 diverting	4 manipulating
5 copying	5 persuading	5 tending
6 comparing	6 speaking-signaling	6 feeding-offbearing
7, 8 no significant relationship	7 serving	7 handling
	8 no significant relationship	8 no significant relationship

For example, the second three digits of the code for *Secretary* (.368) indicate:

Fourth digit:	the worker function "compiling"–(3) in the "data" hierarchy
Fifth digit:	the worker function "speaking-signaling"–(6) in the "people" hierarchy
Sixth digit:	no significant relationship–(8) in the "things" hierarchy

In addition, the three digits indicate that secretaries must report and/or carry out prescribed actions; gather, collate, or classify information; exchange information; and give assignments and/or directions to assistants.[10]

The third group of three digits (seventh, eighth, and ninth) provides a unique suffix code for each job title defined in the DOT. The suffix code differentiates particular jobs within 6-digit job titles. Where a 6-digit code number is applied to only one job title, the suffix code is 010. Jobs that have identical 6-digit *Dictionary* codes begin with the 010 suffix code and progress in

[7] *U.S. Census of Population, 1970: Classified Index of Industries and Occupations* (Bureau of the Census, 1971).

[8] For a detailed explanation of the classification structure, see pp. XV-XXIV of Vol. 1 of the *Dictionary of Occupational Titles, Third Edition* (U.S. Department of Labor, 1965).

[9] *Suffix Codes for Jobs Defined in the Dictionary of Occupational Titles, Third Edition* (U.S. Department of Labor, 1967).

[10] The relationships of worker functions within the data, people, and things hierarchies are explained and defined more fully on pp. 649-50 in app. A in vol. II of the *Dictionary of Occupational Titles*.

additive steps of 4, such as 014, 018, 022. For example, the 6-digit DOT title Secretary (201.368) is further differentiated into the following 9-digit job titles:

201.368-010	Legal secretary
201.368-014	Medical secretary
201.368-018	Secretary

Office of Education classification

The codes for the instructional programs in the Office of Education classification system were intended to help local and State education agencies identify, classify, and describe information about subject matter and curriculum activities. Twenty subject-matter areas plus one area for cocurricular activities and one area for general elementary and secondary education were identified in *Standard Terminology for Curriculum and Instruction in Local and State School Systems.*[11]

Seven of the 22 areas are frequently referred to as vocational-technical, and are:

01. Agriculture
04. Distributive education
07. Health occupations education
09. Home economics
14. Office occupations
16. Technical education
17. Trade and industrial occupations

The selection of the vocational-technical education areas, including the subject matter in them, was determined by (1) an extensive study of record and report forms of local school systems and State education agencies, (2) an extensive review of the professional literature concerned with subject-matter areas and cocurricular activities, and (3) conferences with numerous persons in State education agencies, local school systems, colleges and universities, and the U.S. Office of Education.

The Office of Education classification system was intended to provide a distinct identity for each program area and for each instructional program within it. Although the handbook of standard terminology contains 10-digit codes, the vocational-technical instructional programs have been limited largely to six digits. In several subject-matter areas, 8-digit codes were provided for greater detail. The interpretation of each position in the codes is as follows:

First 2-digit position:	Subject-matter area (e.g., 14, office occupations)
Second 2-digit position:	Principal segment of subject matter (e.g., 14.02, business data processing systems occupations)
Third 2-digit position:	Division of principal segment (e.g., 14.0202, peripheral equipment operators)
Fourth 2-digit position:	First-level detail of division of principal segment (e.g., 14.020201, keypunch and coding equipment operators)
Fifth 2-digit position:	Second-level detail of division of principal segment (no vocational education examples in office occupations; however, there are a few 10-digit codes in agriculture).

The vocational education instructional programs specified by the codes are defined in *Vocational Education and Occupations.*[12] The descriptions of the instructional programs are actually composites of subject matter rather than well-defined courses. Students may have to take courses in other areas of vocational or general education to round out their training. Moreover, the programs are not associated with any particular level of education and are, instead, general descriptions which may be related to several educational levels.

Vocational Education and Occupations also relates the instructional programs in the seven vocational-technical areas to DOT codes and titles. As indicated earlier, this relationship serves as the link between the BLS matrix and the vocational education codes. The other 15 instructional areas have not been linked to occupations.

[11] State Educational Records and Report Series: Handbook VI (U.S. Department of Health, Education, and Welfare, 1970).

[12] *Vocational Education and Occupations* (U.S. Department of Health, Education, and Welfare; U.S. Department of Labor, 1969).

The Conversion Table

Source of data

The source of data for the conversion table (table 1) was a special tabulation from a sample household survey taken in April 1971 by the Bureau of the Census as part of its regular Current Population Survey (CPS).[13] The roughly 60,000 individual responses were allocated to census occupational categories by the Census Bureau and were independently coded to the 1965 *Dictionary of Occupational Titles* (usually at the 9-digit level) by the Occupational Analysis Field Centers, part of the U.S. Employment Service, under the direction of the Manpower Administration.

Construction of the table

The conversion table was developed by first relating the BLS matrix occupational classification system to the *Dictionary of Occupational Titles* and then relating the DOT to the vocational education program codes and titles. The first step was facilitated by the census-to-DOT conversion produced from the CPS sample data. Since the BLS matrix occupational categories are virtually synonymous with the census categories, a link is thereby established between the BLS matrix and the DOT. The second step was made possible by the table in *Vocational Education and Occupations* that links the DOT to vocational education program codes and titles. Thus, the DOT serves as a bridge between the BLS matrix and the vocational education system.

Since a complete listing in the conversion table of all of the DOT codes and titles associated with each BLS matrix category would be unwieldy and would aggravate problems of interpretation, only those DOT occupational titles and codes that constitute at least 5 percent of the total estimated employment in the related matrix category are listed. After the DOT codes and titles which constituted at least 5 percent of estimated employment within each matrix category were determined, each specific DOT occupation was related to its corresponding vocational education code and title (if any) by using the table in *Vocational Education and Occupations*.

Three rankings occur within each matrix title of the conversion table. These rankings serve to indicate the relative importance of the entries in relation to employment.

Ranking vocational programs. The first ranking is that of the vocational programs within each matrix title in those cases where more than one vocational program was associated with a particular matrix category. In all such cases, the number of DOT records within the matrix category that were related to each vocational program were summed, and the vocational programs were ranked vertically in terms of their percentage contribution to total estimated employment in the matrix category. For example, in the conversion table, the matrix title *Foresters and conservationists* is associated with two vocational programs, "Forests" and "Soil." The fact that "Forests" appears first, (that is, above "Soil") indicates that the DOT occupations for which one would be trained in "Forests" are relatively more numerous within this specific matrix title than the DOT occupations for which one would be trained in "Soil."

Ranking DOT codes within each vocational program. The second ranking is that of the DOT codes and titles within each vocational program. In cases where a particular vocational education program was matched with a cluster of DOT occupational titles, those DOT codes and titles were ranked vertically in terms of their percentage contribution to the total estimated employment associated with that vocational program within the matrix title. For example, the vocational program "Forests" is matched with four DOT titles which are ranked vertically. The fact that Forest Fire Fighter appears first indicates that it contributes a greater percentage to the total estimated employment in the cluster than do Fire Lookout, Forester Aid, and Fire Patrolman.

Ranking DOT codes with no corresponding vocational programs. The final ranking is that of the DOT codes with no corresponding vocational education programs. Many DOT codes and titles appear in the conversion table which are not associated with any vocational program. These DOT occupations were

[13] Unpublished data developed for the Interdepartmental Committee on Occupational Classification, Office of Management and Budget, Executive Office of the President.

ranked vertically in terms of their percentage contribution to the total employment constituted by the cluster of all DOT titles within the matrix category that have no association with a vocational program. For instance, in the matrix category *Foresters and conservationists*, Forester (DOT 040.081-038) is associated with no vocational program; however, if other DOT occupations had met the 5-percent criterion within the matrix category, then a ranking would have been necessary. Whenever a single DOT occupation or a cluster of DOT occupations which have no associated vocational programs occurs within a matrix category, they are always ranked after the listing of clusters that are associated with vocational programs.

Illustration of ranking in conversion table

1970 Census code	National/State matrix title	Vocational education system		Dictionary of Occupational Titles	
		Code	Program title	Code	Title
025	Foresters and conservationists	01.0601	Forests	441.887-010	Forest Fire Fighter
				441.168-010	Fire Lookout
				441.384-010	Forester Aid
				441.687-010	Fire Ranger
		01.0603	Soil	040.081-074	Soil Conservationist
		([1])	([1])	040.081-038	Forester

[1] The DOT code has more than 5 percent of the total estimated employment in the National/State matrix occupational title but there is no corresponding specifically detailed vocational education instructional program code.

Interpreting the table

The listing of codes and titles in order of their percentage contribution to total estimated employment provides the vocational education planner with some rough notion of the relative importance to be attached to the various instructional programs and their job content. For example, in the illustration, the conversion table shows that those DOT occupations for which one would be trained in "Forests" are relatively more numerous than those for which one would be trained in "Soil" within the specific matrix title *Foresters and conservationists*. The conversion table, however, provides no basis for comparing the significance of either of these vocational education programs with programs associated with other specific matrix titles. In addition, though the conversion table indicates that those employed in the DOT occupation Forest Fire Fighter are relatively more numerous than those employed in the DOT occupation Fire Lookout, it does not allow any comparison between, say, Forest Fire Fighter and Soil Conservationist. Similarly, DOT occupations which have no corresponding vocational programs may be compared only with other DOT occupations within the matrix title which have no associated vocational programs. In the illustration cited above, no comparison may be made between Forest Fire Fighter and Forester, since the former is associated with a vocational program and the latter is not. To sum up, comparisons of relative employment can only be made within a single matrix category and within a single vocational program.

Planners should be cautioned also that some DOT codes and associated instructional programs may be overemphasized while other important codes and programs may not appear in the table. This problem arises because the 5-percent criterion has been applied to matrix occupational categories that differ in size. As a result, specific DOT job titles and associated instructional programs in the smaller matrix categories may be listed in the table even though their employment is relatively small nationally. Conversely, specific DOT codes and associated instructional programs that contain relatively large employment nationally may not be listed in the table because they appear in large matrix categories.

Limitations of the table

Educators and other training program planners should be cautioned that this table has several important limitations. First, the source of data is a small, limited sample that has errors of coding or judgment or both. Some important DOT titles and jobs and related vocational educational instructional programs may have been overlooked, while others may have been overemphasized. Second, the structure of the various occupational and educational classification systems does not allow a one-to-one matching of the several systems. The following is a more specific discussion of the problems and limitations of the table.

As noted earlier, the source of data for the conversion table was a sample household enumeration conducted in April 1971 by the Bureau of the Census as part of its regular Current Population Survey (CPS). One major shortcoming of this survey is that it includes few questions on the characteristics of a worker's job and the industry of employment. It is evident that the employment service coders had to exercise a considerable amount of judgment in allocating jobs to a very detailed DOT structure. For example, the job title Child monitor is listed only in census codes 942 and 980 in the 1970 census *Classified Index of Occupations* but it is assigned to five census codes in the 1971 CPS (942, Child care workers, except private household; 952, School monitors; 980, Child care workers, private household; 981, Cooks, private household; 984, Cleaners and servants, private household). This report assumes that the judgments made in the 1971 CPS allocation of the DOT codes to the census are correct, and, even if they are not correct, typical of the judgments made in the 1970 census. In effect, it is assumed that the same coding problems existed in classifying job titles in the 1970 census. The aim here is to reveal the classification problem rather than mislead educational planners into the belief that the data are without error.

Since the 1971 CPS Survey was only a snapshot of employment and the distribution of employment may have changed sufficiently so as to render the CPS estimates inaccurate today, the information incorporated in the conversion table must be used with caution. It should be considered as only an approximate ranking of DOT code by employment.

A particular DOT or vocational education code may appear a number of times because it may be related to more than one matrix occupation. There are two fundamental reasons why the vocational education codes tend to appear over a wider range of matrix titles than do the DOT codes. First, the Bureau of the Census allocates specific job titles to census occupational categories in a manner that is not germane to the DOT structure. For example, Advertising Layout Man, a professional occupation in the DOT (DOT code 141.081), is included in the census titles Compositors and typesetters (Census 422), a craft occupation, and Painters and sculptors (Census 190), a professional occupation. Second, the vocational education programs are often composites that have similar skills but may lie in different DOT classifications. For example, the job content of the instructional program "Advertising Services" (04.01) has 15 associated 3-digit DOT codes that span four DOT occupational divisions (professional, technical, and managerial occupations; clerical and sales occupations; service occupations; and miscellaneous occupations). As a result, the projected demand for any specific vocational program or any specific DOT code may be distributed over a wide number of matrix occupational titles. Table 2 of this report shows the matrix titles associated with each vocational education program listed in table 1.

While some of the vocational education programs are for clusters of jobs and are applicable to a number of matrix titles, others are not broad enough to match the matrix titles. These titles tend to be for jobs whose skills may be taught as part of the subject matter of several instructional programs. For example, there is no single vocational program for patternmakers; the skills of patternmakers are introduced in several programs, e.g., "Metal Patternmaking" (17.2309) and "Woodworking" (17.3699).

Another hindrance to matching vocational education codes with matrix categories is the difference in the spectrum of the labor force covered by the two systems. The BLS matrix covers all occupations, while the instructional programs provide training for a small fraction of the total number of workers. Specifically, most of the occupations in the professional, technical, and kindred group of the matrix require a college education, rather than vocational training, and, as a result, have no corresponding vocational education instructional program.[14] Although vocational programs do train technicians (and have corresponding codes), vocational education generally is not directly applicable to most professional occupations, and it would be inaccurate to relate vocational education codes to professional occupations. The reader should note, however, that though there is no vocational program for some occupations (such as a supervisory level nurse), the flow of workers into these occupations will presumably emanate from those trained for entry level positions which *are* associated with vocational programs.

The large number of jobs in the matrix residual titles presents another major barrier. Approximately one-tenth of the total employment in the 1970 census was included in general (residual) categories and was not identified by specific occupation. The residuals are too broad to classify into specific vocational education programs, even though many of the occupations in these large groups have relatively uniform skill or training requirements. Since many of the vocational education training programs are buried in the residuals, the matrix

[14] While there is a classification system for higher education, it has not been defined in terms of its jobs or occupations and therefore cannot be converted into any of the occupational classification schemes of this report. See *A Taxonomy of Instructional Programs in Higher Education* (U.S. Department of Health, Education, and Welfare, 1970).

cannot be used to make projections for all of the individual vocational education programs. Moreover, the many jobs included in the residuals may have widely differing growth rates, and one overall projection would be of limited value to planners.

Even if a match between a matrix occupational title and a vocational education instructional program in the table is perfect (no other program codes matched with the occupational title and no other occupational title matched with the vocational education program), one cannot necessarily conclude that a perfect match exists in reality. There may be DOT occupations associated with the vocational education program which are not germane to the matched matrix title and which have not been listed in the table because they are insignificant. For example, the instructional program "Ship and Boat Operation and Maintenance" (17.0802) is matched with the matrix title Boat Operators and has no other match in the table with a specific matrix occupational title (other than a residual). Nevertheless, there are other DOT titles for which "Ship and Boat Operation and Maintenance" is the appropriate instructional program that are included in the census title Officers, pilots, pursers; Ship (e.g. Pilot, ship, DOT 197.133-026) but are not listed in the table.

In short, a perfect match of BLS matrix occupational titles and instructional programs is impossible without serious modification of one or the other of the classification systems. Although this report is intended to alleviate the problem of matching, educators and other training planners still face some difficulties in using data on supply and demand by occupation. However, the table may enable innovative planners to reorder the various classification systems into more closely matchable groups. It is a temporary tool for matching classification systems; the only permanent solution can come from the completion of the *Standard Occupational Classification System.*

Table 1. Conversion of National/State Matrix titles to vocational education classification system

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
	PROFESSIONAL, TECHNICAL AND KINDRED WORKERS				
006	ENGINEERS, AERO-ASTRONAUTICAL	(1)	(1)	002.081-014	AERONAUTICAL ENGINEER
		(1)	(1)	002.081-018	AIRCRAFT DESIGNER
		(1)	(1)	002.081-050	TEST ENGINEER, AIRCRAFT
010	ENGINEERS, CHEMICAL	(1)	(1)	008.081-014	CHEMICAL ENGINEER
		(1)	(1)	006.081-010	CERAMIC ENGINEER
011	ENGINEERS, CIVIL	(1)	(1)	005.081-014	CIVIL ENGINEER
		(1)	(1)	005.081-022	HIGHWAY ENGINEER
		(1)	(1)	005.081-018	CONSTRUCTION ENGINEER
		(1)	(1)	005.081-058	STRUCTURAL ENGINEER
012	ENGINEERS, ELECTRICAL	(1)	(1)	003.081-018	ELECTRICAL ENGINEER
		(1)	(1)	003.081-034	ELECTRONIC ENGINEER
013	ENGINEERS, INDUSTRIAL	(1)	(1)	012.188-030	INDUSTRIAL ENGINEER
		(1)	(1)	012.081-010	SAFETY ENGINEER
		(1)	(1)	012.188-062	QUALITY CONTROL ENGINEER
		(1)	(1)	020.088-022	OPERATIONS RESEARCH ANALYST
014	ENGINEERS, MECHANICAL	(1)	(1)	007.081-038	MECHANICAL ENGINEER
015	ENGINEERS, METALLURGICAL	(1)	(1)	011.081-022	METALLURGIST, PHYSICAL
		(1)	(1)	011.081-030	WELDING ENGINEER
020	ENGINEERS, MINING	(1)	(1)	010.081-018	MINING ENGINEER
021	ENGINEERS, PETROLEUM	(1)	(1)	010.081-022	PETROLEUM ENGINEER
022	ENGINEERS, SALES	04.12	INDUSTRIAL MARKETING	163.118-026	MANAGER, SALES
		(1)	(1)	007.081-038	MECHANICAL ENGINEER
		(1)	(1)	007.151-010	HEATING ENGINEER
023	ENGINEERS, OTHER	16.0113	MECHANICAL TECHNOLOGY	007.181-022	ENGINEERING ASSISTANT, MECHANICAL EQUIPMENT
		(1)	(1)	007.081-038	MECHANICAL ENGINEER
042	AGRICULTURAL SCIENTISTS	(1)	(1)	040.081-046	HORTICULTURIST
043	ATMOSPHERIC AND SPACE SCIENTISTS	16.0699	MISCELLANEOUS TECHNICAL EDUCATION, OTHER	025.288-018	WEATHER OBSERVER
		(1)	(1)	025.088-014	METEOROLOGIST
044	BIOLOGICAL SCIENTISTS	07.0201	CYTOLOGY (CYTOTECHNOLOGY)	078.281-014	CYTOTECHNOLOGIST
		(1)	(1)	041.081-094	MICROBIOLOGIST
		(1)	(1)	041.081-034	BIOLOGIST

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
044	-CONTINUED	(1)	(1)	041.081-118	PHYSIOLOGIST
045	CHEMISTS	(1)	(1)	022.081-014	CHEMIST, ANALYTICAL
		(1)	(1)	022.081-042	CHEMIST, ORGANIC
		(1)	(1)	041.081-030	BIOCHEMIST
		(1)	(1)	022.081-034	CHEMIST, INORGANIC
		(1)	(1)	011.081-018	METALLURGIST, EXTRACTIVE
		(1)	(1)	011.081-022	METALLURGIST, PHYSICAL
051	GEOLOGISTS	(1)	(1)	024.081-018	GEOLOGIST
		(1)	(1)	024.081-022	GEOLOGIST, PETROLEUM
		(1)	(1)	024.081-038	GEOPHYSICIST
052	MARINE SCIENTISTS	(1)	(1)	024.081-058	OCEANOGRAPHER, PHYSICAL
053	PHYSICISTS AND ASTRONOMERS	(1)	(1)	023.081-010	PHYSICIST
		(1)	(1)	021.088-010	ASTRONOMER
054	LIFE AND PHYSICAL SCIENTISTS, N.E.C.	(2)	(2)	(2)	(2)
034	ACTUARIES	(1)	(1)	020.188-010	ACTUARY
035	MATHEMATICIANS	(1)	(1)	020.088-018	MATHEMATICIAN
036	STATISTICIANS	(1)	(1)	020.188-034	STATISTICIAN, APPLIED
150	AGRICULTURAL AND BIOLOGICAL TECHNICIANS, EXCEPT HEALTH	16.0105	CHEMICAL TECHNOLOGY	029.281-081	LABORATORY TESTER I
		16.0203	FOOD PROCESSING TECHNOLOGY	029.381-034	LABORATORY TESTER II
		01.0299	AGRICULTURAL SUPPLIES/SERVICES, OTHER	467.384-022	POULTRY INSEMINATOR
		(1)	(1)	559.782-146	PHARMACEUTICAL OPERATOR, SENIOR
151	CHEMICAL TECHNICIANS	16.0105	CHEMICAL TECHNOLOGY	029.281-018	LABORATORY TESTER I
				022.2[illegible]-014	CHEMICAL LABORATORY TECHNICIAN
				029.281-026	TESTER
152	DRAFTERS	17.13	DRAFTING	007.281-014	DRAFTER, MECHANICAL
				001.281-010	DRAFTER, ARCHITECTURAL
				005.281-014	DRAFTER, CIVIL
				003.281-010	DRAFTER, ELECTRICAL
		(1)	(1)	017.281-046	DRAFTER, COMMERIAL
153	ELECTRICAL AND ELECTRONIC ENGINEERING TECHNICIANS	16.0108	ELECTRONIC TECHNOLOGY	003.181-014	ELECTRONIC TECHNICIAN
				828.281-022	ELECTRONICS MECHANIC
		16.0107	ELECTRICAL TECHNOLOGY	003.181-010	ELECTRICAL TECHNICIAN
154	INDUSTRIAL ENGINEERING TECHNICIANS	16.011303	PRODUCTION	019.281-018	QUALITY CONTROL TECHNICIAN

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
154	-CONTINUED	16.0111	INDUSTRIAL TECHNOLOGY	012.188-058	PRODUCTION PLANNER
				012.188-078	TOOL PLANNER
		(1)	(1)	012.168-010	DIRECTOR, QUALITY CONTROL
156	MATHEMATICAL TECHNICIANS	(1)	(1)	020.188-022	MATHEMATICAL TECHNICIAN
155	MECHANICAL ENGINEERING TECHNICIANS	16.0113	MECHANICAL TECHNOLOGY	007.181-026	MECHANICAL ENGINEERING TECHNICIAN
161	SURVEYORS	(1)	(1)	018.188-026	SURVEYOR
162	ENGINEERING AND SCIENCE TECHNICIANS, N.E.C.	16.0113	MECHANICAL TECHNOLOGY	007.181-026	MECHANICAL ENGINEERING TECHNICIAN
				007.181-022	ENGINEERING ASSISTANT, MECHANICAL EQUIPMENT
		16.0105	CHEMICAL TECHNOLOGY	029.281-018	LABORATORY TESTER
061	CHIROPRACTORS	(1)	(1)	079.108-014	CHIROPRACTOR
062	DENTISTS	(1)	(1)	072.108-010	DENTIST
074	DIETITIANS	(1)	(1)	077.168-014	DIETITIAN
		(1)	(1)	077.168-010	DIETETIC INTERN
063	OPTOMETRISTS	(1)	(1)	079.108-026	OPTOMETRIST
064	PHARMACISTS	04.08	GENERAL MERCHANDISE	185.168-054	MANAGER, STORE I
		(1)	(1)	074.181-010	PHARMACIST
065	PHYSICIANS, MEDICAL AND OSTEOPATHIC	(1)	(1)	070.108-026	GENERAL PRACTITIONER
		(1)	(1)	070.101-014	SURGEON
		(1)	(1)	070.108-058	PEDIATRICIAN
071	PODIATRISTS	(1)	(1)	079.108-030	PODIATRIST
075	REGISTERED NURSES	07.0301	NURSING (ASSOCIATE DEGREE)	075.378-014	NURSE, GENERAL DUTY
		(1)	(1)	075.378-018	NURSE, OFFICE
076	THERAPISTS	07.0903	INHALATION THERAPY	079.368-018	INHALATION THERAPIST
		07.0402	PHYSICAL THERAPY	355.878-014	ATTENDANT, PHYSICAL THERAPY
		07.0304	PSYCHIATRIC AIDE	355.878-042	PSYCHIATRIC AIDE
		(1)	(1)	079.378-034	PHYSICAL THERAPIST
		(1)	(1)	079.108-034	SPEECH CLINICIAN
		(1)	(1)	079.128-018	OCCUPATIONAL THERAPIST
		(1)	(1)	045.108-010	COUNSELOR
072	VETERINARIANS	(1)	(1)	073.108-014	VETERINARIAN
		(1)	(1)	073.081-014	VETERINARY ANATOMIST
073	OTHER MEDICAL AND HEALTH PRACTITIONERS	(2)	(2)	(2)	(2)

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
080	CLINICAL TECHNOLOGISTS AND TECHNICIANS	07.0203	MEDICAL LABORATORY ASSISTING	078.281-018	MEDICAL TECHNOLOGIST
				078.381-010	MEDICAL LABORATORY ASSISTANT
		07.0202	HISTOLOGY	078.381-081	TISSUE TECHNOLOGIST
081	DENTAL HYGIENISTS	07.0102	DENTAL HYGIENE (ASSOCIATE DEGREE)	078.368-014	DENTAL HYGIENIST
082	HEALTH RECORD TECHNOLOGISTS AND TECHNICIANS	(1)	(1)	100.388-018	MEDICAL RECORD LIBRARIAN
		(1)	(1)	100.168-010	BOOKMOBILE LIBRARIAN
		(1)	(1)	100.168-030	LIBRARIAN, REFERENCE LIBRARY
		(1)	(1)	100.168-038	PATIENTS' LIBRARIAN
083	RADIOLOGIC TECHNOLOGISTS AND TECHNICIANS	17.2002	RADIOGRAPHER	199.381-010	RADIOGRAPHER
				078.368-030	RADIOLOGIC TECHNOLOGIST
				079.368-030	X-RAY CLERK
084	THERAPY ASSISTANTS	07.0402	PHYSICAL THERAPY	355.878-014	ATTENDANT, PHYSICAL THERAPY
085	OTHER HEALTH TECHNOLOGISTS AND TECHNICIANS	07.0902	ELECTROCARDIOGRAPH TECHNICIAN	078.369-018	ELECTROCARDIOGRAPH TECHNICIAN
		07.0305	SURGICAL TECHNICIAN (OPERATING ROOM TECHNICIAN)	079.378-042	SURGICAL TECHNICIAN
		07.0304	PSYCHIATRIC AIDE	355.878-042	PSYCHIATRIC AIDE
		07.0203	MEDICAL TECHNOLOGY ASSISTING	078.281-018	MEDICAL TECHNOLOGIST
163	AIRPLANE PILOTS	16.0601	COMMERCIAL PILOT TRAINING	196.283-014	AIRPLANE PILOT, COMMERCIAL
164	AIR TRAFFIC CONTROLLERS	17.0403	GROUND OPERATIONS	193.168-018	AIR TRAFFIC CONTROL SPECIALIST, TOWER
				193.168-014	AIR TRAFFIC CONTROL SPECIALIST, STATION
165	EMBALMERS	04.15	PERSONAL SERVICES	187.168-026	DIRECTOR, FUNERAL
		17.0909	MORTUARY SCIENCE	338.381-010	EMBALMER
170	FLIGHT ENGINEERS	17.0402	AIRCRAFT OPERATIONS	621.281-038	FLIGHT ENGINEER
171	RADIO OPERATORS	(1)	(1)	379.368-010	DISPATCHER, RADIO
		(1)	(1)	003.187-050	RADIO ENGINEER
		(1)	(1)	193.282-022	RADIO OFFICER
172	TOOL PROGRAMMERS, NUMERICAL CONTROL	16.0113	MECHANICAL TECHNOLOGY	007.187-002	TOOL PROGRAMMER, NUMERICAL CONTROL
173	OTHER TECHNICIANS, EXCEPT HEALTH	16.0108	ELECTRONIC TECHNOLOGY	003.181-014	ELECTRONIC TECHNICIAN
		16.0105	CHEMICAL TECHNOLOGY	029.281-018	LABORATORY TESTER I
003	COMPUTER PROGRAMMERS	14.0203	PROGRAMMERS	020.188-026	PROGRAMMER, BUSINESS
		16.0117	SCIENTIFIC DATA PROCESSING	020.188-030	PROGRAMMER, ENGINEERING AND SCIENTIFIC
004	COMPUTER SYSTEMS ANALYSTS	14.0204	SYSTEMS ANALYSTS	012.168-022	SYSTEMS ANALYST, BUSINESS ELECTRONIC DATA PROCESSING

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
004	-CONTINUED	14.0203	PROGRAMMERS	020.188-026	PROGRAMMER, BUSINESS
		(1)	(1)	020.088-010	ENGINEERING ANALYST
		(1)	(1)	003.187-058	SYSTEMS ENGINEER, ELECTRONIC DATA PROCESSING
005	COMPUTER SPECIALISTS, N.E.C.	14.0204	SYSTEMS ANALYSTS	012.168-022	SYSTEMS ANALYST, BUSINESS ELECTRONIC DATA PROCESSING
		(1)	(1)	020.088-010	ENGINEERING ANALYST
091	ECONOMISTS	04.01	ADVERTISING SERVICES	050.088-034	MARKET-RESEARCH ANALYST
		(1)	(1)	050.088-014	ECONOMIST
		(1)	(1)	020.188-018	FINANCIAL ANALYST
092	POLITICAL SCIENTISTS	(1)	(1)	051.088-014	POLITICAL SCIENTIST
093	PSYCHOLOGISTS	(1)	(1)	045.108-034	PSYCHOLOGIST, SCHOOL
		(1)	(1)	045.108-022	PSYCHOLOGIST, CLINICAL
		(1)	(1)	045.088-014	PSYCHOLOGIST, EDUCATIONAL
		(1)	(1)	090.288-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
		(1)	(1)	045.108-026	PSYCHOLOGIST, COUNSELING
094	SOCIOLOGISTS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
095	URBAN AND REGIONAL PLANNERS	(1)	(1)	199.168-014	URBAN PLANNER
		(1)	(1)	199.288-018	TRAFFIC TECHNICIAN
096	OTHER SOCIAL SCIENTISTS	(1)	(1)	052.088-018	HISTORIAN
		(1)	(1)	055.088-018	ARCHEOLOGIST
141	ADULT EDUCATION TEACHERS	(1)	(1)	091.228-018	TEACHER, SECONDARY SCHOOL
		(1)	(1)	097.228-026	INSTRUCTOR, VOCATIONAL TRAINING
		(1)	(1)	099.228-038	TEACHER, ADULT EDUCATION
		(1)	(1)	090.228-026	TEACHER, TECHNICAL EDUCATION
102	AGRICULTURE TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
123	ART, DRAMA, MUSIC TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
		(1)	(1)	152.028-010	TEACHER, MUSIC
103	ATMOSPHERIC, EARTH, MARINE, SPACE TEACHERS	(1)	(1)	024.081-018	GEOLOGIST
104	BIOLOGY TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
		(1)	(1)	090.999-010	GRADUATE ASSISTANT
115	BUSINESS AND COMMERCE TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
105	CHEMISTRY TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
124	COACHES AND PHYSICAL EDUCATION TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
116	ECONOMICS TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
125	EDUCATION TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
142 (N)	ELEMENTARY SCHOOL TEACHERS	(1)	(1)	092.228-010	TEACHER, ELEMENTARY SCHOOL
111	ENGINEERING TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
126	ENGLISH TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
		(1)	(1)	091.228-018	TEACHER, SECONDARY SCHOOL
130	FOREIGN LANGUAGE TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
		(1)	(1)	091.228-081	TEACHER, SECONDARY SCHOOL
113	HEALTH SPECIALTIES TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
		(1)	(1)	075.128-022	NURSE INSTRUCTOR
120	HISTORY TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
131	HOME ECONOMICS TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
		(1)	(1)	091.228-018	TEACHER, SECONDARY SCHOOL
132	LAW TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
112	MATH TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
110	PHYSICS TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
143	PREKINDERGARTEN AND KINDERGARTEN TEACHERS	(1)	(1)	092.228-014	TEACHER, KINDERGARTEN
		(1)	(1)	092.228-010	TEACHER, ELEMENTARY SCHOOL
114	PSYCHOLOGY TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
144	SECONDARY SCHOOL TEACHERS	(1)	(1)	091.228-018	TEACHER, SECONDARY SCHOOL
121	SOCIOLOGY TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
122	SOCIAL SCIENCE TEACHERS, N.E.C.	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
135	MISCELLANEOUS TEACHERS, COLLEGE AND UNIVERSITY	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
140	TEACHERS, COLLEGE AND UNIVERSITY, NOT SPECIFIED	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
133	THEOLOGY TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
134	TRADE, INDUSTRIAL, TECHNICAL TEACHERS	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
		(1)	(1)	097.228-026	INSTRUCTOR, VOCATIONAL TRAINING
149	TEACHERS, EXCEPT COLLEGE AND UNIVERSITY N.E.C.	(1)	(1)	152.028-010	DIRECTOR, STAGE
		(1)	(1)	151.028-014	INSTRUCTOR, DANCING
		(1)	(1)	099.228-042	TUTOR
		(1)	(1)	091.228-018	TEACHER, SECONDARY SCHOOL
		(1)	(1)	149.028-010	TEACHER, ART
175	ACTORS	(1)	(1)	150.048-010	ACTOR
180	ATHLETES AND KINDRED WORKERS	01.0101	ANIMAL SCIENCE	153.228-026	HORSE TRAINER I
		(1)	(1)	153.228-022	GOLF PROFESSIONAL
		(1)	(1)	099.228-010	ATHLETIC COACH
		(1)	(1)	153.348-010	ATHLETE
		(1)	(1)	153.228-042	INSTRUCTOR, PHYSICAL EDUCATION
		(1)	(1)	153.228-046	INSTRUCTOR, RIDING
		(1)	(1)	153.228-050	INSTRUCTOR, SWIMMING
181	AUTHORS	(1)	(1)	130.008-014	LITERARY WRITER
		(1)	(1)	139.288-314	WRITER, TECHNICAL PUBLICATIONS
182	DANCERS	(1)	(1)	151.048-010	DANCER
183	DESIGNERS	17.0701	INTERIOR DECORATING	142.051-014	INTERIOR DESIGNER AND DECORATOR
		(1)	(1)	142.081-018	CLOTHES DESIGNER
184	EDITORS AND REPORTERS	04.01	ADVERTISING SERVICES	132.088-010	COPYWRITER
		(1)	(1)	132.268-018	REPORTER
		(1)	(1)	132.038-034	EDITOR, TRADE OR TECHNICAL PUBLICATION
		(1)	(1)	132.068-022	EDITOR, MAGAZINE
		(1)	(1)	132.018-014	EDITOR, MANAGING, NEWSPAPER
		(1)	(1)	132.038-014	EDITOR, DEPARTMENT
		(1)	(1)	132.288-038	EDITORIAL ASSISTANT
185	MUSICIANS AND COMPOSERS	(1)	(1)	152.048-030	MUSICIAN, INSTRUMENTAL
		(1)	(1)	152.048-038	POPULAR SINGER
190	PAINTERS AND SCULPTORS	17.07	COMMERCIAL ART OCCUPATIONS	141.031-014	DIRECTOR, ART
		17.0703	PRODUCT DESIGN	970.381-042	PAINTER, HAND

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
190	-CONTINUED	(1)	(1)	141.081-042	ILLUSTRATOR
		(1)	(1)	144.081-018	PAINTER
		(1)	(1)	142.081-038	DISPLAY ARTIST
191	PHOTOGRAPHERS	04.15	PERSONAL SERVICES	143.062-022	MANAGER, PHOTOGRAPHIC GALLERY OR STUDIO
		(1)	(1)	143.062-038	PHOTOGRAPHER, NEWS
		(1)	(1)	143.062-034	PHOTOGRAPHER, COMMERCIAL
		(1)	(1)	143.062-042	PHOTOGRAPHER, PORTRAIT
192	PUBLIC RELATIONS SPECIALISTS AND PUBLICITY WRITERS	04.01	ADVERTISING SERVICES	165.068-018	PUBLIC RELATIONS PRACTITIONER I
				165.068-010	DEALER-CONTACT SPECIALIST
		(1)	(1)	165.068-022	PUBLIC RELATIONS PRACTITIONER II
193	RADIO AND TV ANNOUNCERS	(1)	(1)	159.148-010	ANNOUNCER
		(1)	(1)	159.148-014	ANNOUNCER
		(1)	(1)	131.068-010	NEWS ANALYST, BROADCAST
194	WRITERS, ARTISTS, AND ENTERTAINERS, N.E.C.	01.0101	ANIMAL SCIENCE	153.228-026	HORSE TRAINER I
		(1)	(1)	159.148-022	DISC JOCKEY
		(1)	(1)	139.288-014	WRITER, TECHNICAL PUBLICATIONS
		(1)	(1)	159.228-014	DOG TRAINER
001	ACCOUNTANTS	14.0303	GENERAL OFFICE CLERKS	219.488-010	ACCOUNTING CLERK
		(1)	(1)	160.188-010	ACCOUNTANT
		(1)	(1)	160.188-038	AUDITOR
002	ARCHITECTS	(1)	(1)	001.081-010	ARCHITECT
033	ARCHIVISTS AND CURATORS	(1)	(1)	102.118-010	CURATOR
		(1)	(1)	102.381-010	MUSEUM TECHNICIAN
086	CLERGY	(1)	(1)	120.108-010	CLERGY
090	RELIGIOUS WORKERS, EXCEPT CLERGY	(1)	(1)	120.108-014	DIRECTOR OF RELIGIOUS ACTIVITIES
024	FARM MANAGEMENT ADVISORS	01.02	AGRICULTURAL SUPPLIES/SERVICES	096.128-014	COUNTY AGRICULTURAL AGENT
025	FORESTERS AND CONSERVATIONISTS	01.0601	FORESTS	441.887-010	FOREST FIRE FIGHTER
				441.168-010	FIRE LOOKOUT
				441.384-010	FORESTER AID
				441.687-010	FIRE RANGER
		01.0603	SOIL	040.081-074	SOIL CONSERVATIONIST
		(1)	(1)	040.081-038	FORESTER
026	HOME MANAGEMENT ADVISORS	(1)	(1)	096.128-030	HOME ECONOMIST

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
030	JUDGES	(1)	(1)	111.108-010	JUDGE
031	LAWYERS	(1)	(1)	110.108-010	LAWYER
032	LIBRARIANS	14.0499	INFORMATION COMMUNICATION OCCUPATIONS, OTHER	249.368-050	LIBRARY ASSISTANT
		(1)	(1)	100.168-026	LIBRARIAN
		(1)	(1)	100.168-010	BOOKMOBILE LIBRARIAN
		(1)	(1)	100.168-018	CHILDREN'S LIBRARIAN
		(1)	(1)	100.168-030	LIBRARIAN, REFERENCE LIBRARY
055	OPERATIONS AND SYSTEMS RESEARCHERS AND ANALYSTS	14.0804	DATA-METHODS AND SYSTEMS PROCEDURES ANALYSTS	161.268-010	CLERICAL TECHNICIAN
		(1)	(1)	012.168-022	SYSTEMS ANALYST, BUSINESS ELECTRONIC DATA PROCESSING
056	PERSONNEL AND LABOR RELATIONS WORKERS	14.0602	INTERVIEWERS AND TEST TECHNICIANS	166.268-014	EMPLOYMENT INTERVIEWER
		14.0603	PERSONNEL ASSISTANTS	166.118-022	MANAGER, PERSONNEL
		(1)		045.108-010	COUNSELOR
195	RESEARCH WORKERS, NOT SPECIFIED	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
		(1)	(1)	090.999-010	GRADUATE ASSISTANT
		(1)	(1)	189.118-014	DIRECTOR, RESEARCH AND DEVELOPMENT
		(1)	(1)	189.118-010	ASSOCIATION EXECUTIVE
101	RECREATION WORKERS	04.18	RECREATION AND TOURISM	195.168-026	DIRECTOR, RECREATION CENTER
		(1)	(1)	187.118-046	RECREATION SUPERVISOR
		(1)	(1)	195.228-014	RECREATION LEADER
		(1)	(1)	187.118-070	SUPERINTENDENT, RECREATION
		(1)	(1)	187.118-014	DIRECTOR COMMUNITY ORGANIZATION
		(1)	(1)	159.228-010	COUNSELOR, CAMP
100	SOCIAL WORKERS	(1)	(1)	195.108-010	CASEWORKER
		(1)	(1)	045.108-010	COUNSELOR
		(1)	(1)	195.108-050	SOCIAL WORKER, PSYCHIATRIC
		(1)	(1)	195.108-030	PAROLE OFFICER
		(1)	(1)	195.108-034	PROBATION OFFICER
174	VOCATIONAL AND EDUCATIONAL COUNSELORS	(1)	(1)	045.108-010	COUNSELOR
		(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
	MANAGERS AND ADMINISTRATORS, EXCEPT FARM				
202	BANK OFFICERS AND FINANCIAL MANAGERS	04.04	FINANCE AND CREDIT	186.118-026	MANAGER, FINANCIAL INSTITUTION

See FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
202	-CONTINUED	(1)	(1)	186.288-010	LOAN OFFICER
		(1)	(1)	186.168-010	BANK CASHIER
		(1)	(1)	186.118-014	CONTROLLER
		(1)	(1)	186.118-054	VICE PRESIDENT, BANK
		(1)	(1)	186.118-022	PRESIDENT
210	CREDIT AND COLLECTION MANAGERS	14.0899	SUPERVISORY AND ADMINISTRATIVE OCCUPATIONS, OTHER	168.168-050	MANAGER, CREDIT AND COLLECTION
203	BUYERS AND SHIPPERS, FARM PRODUCTS	01.0401	FOOD PRODUCTS	162.168-010	BUYER, GRAIN
				162.158-054	BUYER, LIVESTOCK
				162.158-082	FIELD-CONTACT TECHNICIAN
		04.06	FOOD DISTRIBUTION	162.158-074	COMMISSION AGENT, LIVESTOCK
		01.01	AGRICULTURAL PRODUCTION	180.118-010	FIELD CONTRACTOR
205	BUYERS, WHOLESALE AND RETAIL TRADE	04.08	GENERAL MERCHANDISE	162.158-050	BUYER II
				185.168-054	MANAGER, STORE I
		04.99	DISTRIBUTIVE EDUCATION, OTHER	162.158-102	PURCHASING AGENT
220	PURCHASING AGENTS AND BUYERS, NEC	04.99	DISTRIBUTIVE EDUCATION, OTHER	162.158-102	PURCHASING AGENT
		04.17	REAL ESTATE	191.118-050	RIGHT-OF-WAY AGENT
		(1)	(1)	223.368-014	PROCUREMENT CLERK
231	SALES MANAGERS AND DEPARTMENT HEADS, RETAIL TRADE	04.08	GENERAL MERCHANDISE	299.138-022	MANAGER, DEPARTMENT
				185.168-054	MANAGER, STORE I
		04.12	INDUSTRIAL MARKETING	163.118-026	MANAGER, SALES
				183.118-010	MANAGER, BRANCH
		04.06	FOOD DISTRIBUTION	299.138-014	DEPARTMENT HEAD, SUPERMARKET
		04.16	PETROLEUM	185.168-058	MANAGER, STORE II
233	SALES MANAGERS, EXCEPT RETAIL TRADE	04.12	INDUSTRIAL MARKETING	163.118-026	MANAGER, SALES
				183.118-010	MANAGER, BRANCH
201	ASSESSORS, CONTROLLERS, AND TREASURERS; LOCAL PUBLIC ADMINISTRATION	14.0802	BUDGET MANAGEMENT ANALYSTS	161.118-018	TREASURER
		(1)	(1)	188.188-010	ASSESSOR
		(1)	(1)	188.168-098	REVENUE AGENT
213	CONSTRUCTION INSPECTORS, PUBLIC ADMINISTRATION	17.2899	PUBLIC SERVICE OCCUPATIONS, OTHER	168.168-010	BUILDING INSPECTOR
				168.168-026	ELECTRICAL INSPECTOR
				168.284-010	SAFETY INSPECTOR I
212	HEALTH ADMINISTRATORS	(1)	(1)	187.118-062	SUPERINTENDENT, HOSPITAL

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
212	-CONTINUED	(1)	(1)	187.118-066	SUPERINTENDENT, INSTITUTION
		(1)	(1)	075.128-034	NURSE SUPERVISOR
215	INSPECTORS, EXCEPT CONSTRUCTION, PUBLIC ADMINISTRATION	17.03	AUTOMOBILE SERVICES	379.384-010	AUTOMOBILE TESTER
		(1)	(1)	168.287-042	FOOD AND DRUG INSPECTOR
		(1)	(1)	379.268-014	DRIVERS LICENSE EXAMINER
		(1)	(1)	168.168-034	IMMIGRATION INSPECTOR
		(1)	(1)	168.168-042	INVESTIGATOR
222	OFFICIALS AND ADMINISTRATORS, N. E. C.	14.0801	ADMINISTRATIVE ASSISTANTS	169.168-014	ADMINISTRATIVE ASSISTANT
224	POSTMASTERS AND MAIL SUPERINTENDENTS	14.0403	MAIL AND POSTAL CLERKS	232.138-010	SUPERVISOR, MAILS
				188.168-086	POSTMASTER
235	SCHOOL ADMINISTRATORS, COLLEGE	(1)	(1)	090.228-010	FACULTY MEMBER, COLLEGE OR UNIVERSITY
		(1)	(1)	090.118-018	DEAN OF STUDENTS
		(1)	(1)	090.168-034	REGISTRAR, COLLEGE OR UNIVERSITY
		(1)	(1)	090.118-010	ACADEMIC DEAN
		(1)	(1)	090.168-010	DEPARTMENT HEAD, COLLEGE OR UNIVERSITY
240	SCHOOL ADMINISTRATORS, ELEMENTARY AND SECONDARY	(1)	(1)	091.118-014	PRINCIPAL
		(1)	(1)	091.118-018	SUPERINTENDENT OF SCHOOLS
		(1)	(1)	091.118-010	PRINCIPAL, PRIVATE SCHOOL
		(1)	(1)	099.118-018	SUPERVISOR, EDUCATION
211	FUNERAL DIRECTORS	04.15	PERSONAL SERVICES	187.168-026	DIRECTOR, FUNERAL
216	MANAGERS AND SUPERINTENDENTS, BUILDING	04.17	REAL ESTATE	186.168-022	MANAGER, APARTMENT HOUSE I
				187.168-194	SUPERINTENDENT, BUILDING II
				186.168-034	MANAGER, PROPERTY
		04.11	HOTEL AND LODGING	320.137-010	MANAGER, LODGING FACILITIES
220	OFFICE MANAGERS, N. E. C.	14.0805	OFFICE MANAGERS AND CHIEF CLERKS	169.168-062	MANAGER, OFFICE
221	OFFICERS, PILOTS, AND PURSERS, SHIP	17.08	COMMERICAL FISHING OCCUPATIONS	197.133-010	CAPTAIN, FISHING VESSEL
		(1)	(1)	197.133-022	MATE, SHIP
		(1)	(1)	197.133-030	TUGBOAT CAPTAIN
		(1)	(1)	197.168-026	MASTER, SHIP
223	OFFICIALS OF LODGES, SOCIETIES, AND UNIONS	(1)	(1)	187.118-010	BUSINESS AGENT, LABOR UNION

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
223	-CONTINUED	(1)	(1)	189.118-022	PRESIDENT
226	RAILROAD CONDUCTORS	(1)	(1)	198.168-022	CONDUCTOR, ROAD FREIGHT
		(1)	(1)	198.168-014	CONDUCTOR PASSENGER CAR
		(1)	(1)	198.168-010	CONDUCTOR TRAIN
230	RESTAURANT, CAFETERIA, AND BAR MANAGERS	04.07	FOOD SERVICES	187.168-126	MANAGER, RESTAURANT OR COFFEE SHOP
				187.168-106	MANAGER, LIQUOR ESTABLISHMENT
		09.0203	FOOD MANAGEMENT, PRODUCTION, AND SERVICES	187.168-066	MANAGER, CAFETERIA OR LUNCH ROOM
		04.08	GENERAL MERCHANDISE	185.168-054	MANAGER, STORE I
245	MANAGERS AND ADMINISTRATORS, N.E.C.	04.08	GENERAL MERCHANDISE	185.168-054	MANAGER, STORE I
		(1)	(1)	182.168-010	CONTRACTOR
		(1)	(1)	189.118-022	PRESIDENT
	SALES WORKERS				
260	ADVERTISING AGENTS AND SALES WORKERS	04.01	ADVERTISING SERVICES	258.358-010	SALES AGENT, ADVERTISING
				253.358-010	SALES AGENT, RADIO AND TV TIME
				164.168-010	ACCOUNT EXECUTIVE
261	AUCTIONEERS	04.08	GENERAL MERCHANDISE	294.258-010	AUCTIONEER
262	DEMONSTRATORS	04.08	GENERAL MERCHANDISE	297.458-010	DEMONSTRATOR
				289.458-014	SALESPERSON, GENERAL
				294.258-010	AUCTIONEER
				266.358-014	SALESPERSON, COSMETICS AND TOILETRIES
		04.20	RETAIL TRADE, OTHER	289.358-022	SALES AGENT, HOUSE TO HOUSE
		04.02	APPAREL AND ACCESSORIES	263.458-022	SALESPERSON, WOMEN'S GARMENTS
				283.358-010	SALESPERSON, JEWELRY AND OPTICAL GOODS
				283.358-014	SALESPERSON, HOBBIES AND CRAFTS
264	HUCKSTERS AND PEDDLERS	04.20	RETAIL TRADE, OTHER	289.358-022	SALES AGENT, HOUSE TO HOUSE
				293.358-026	SOLICITOR
		04.08	GENERAL MERCHANDISE	266.358-014	SALESPERSON, COSMETICS AND TOILETRIES
265	INSURANCE AGENTS, BROKERS, AND UNDERWRITERS	04.13	INSURANCE	250.258-014	SALES AGENT, INSURANCE
				169.188-014	UNDERWRITER
266	NEWSPAPER CARRIERS AND VENDORS	(1)	(1)	291.868-010	NEWSPAPER CARRIER
		(1)	(1)	291.858-018	NEWSPAPER VENDOR, STREET

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
270	REAL ESTATE AGENTS AND BROKERS	04.11	REAL ESTATE	250.358-026	SALES AGENT, REAL ESTATE
271	STOCK AND BOND SALES AGENTS	04.04	FINANCE AND CREDIT	251.258-010	SALES AGENT, SECURITIES
				162.158-022	BROKERS' FLOOR REPRESENTATIVE
				186.168-054	SECURITIES TRADER
		(1)	(1)	020.188-018	FINANCIAL ANALYST
281	SALES REPRESENTATIVES, MANUFACTURING	04.12	INDUSTRIAL MARKETING	289.358-014	SALES AGENT, BOTTLES AND BOTTLING EQUIPMENT
				289.158-010	MANUFACTURER'S REPRESENTATIVE
		04.09	HARDWARE, BUILDING MATERIALS, FARM AND GARDEN SUPPLIES AND EQUIPMENT	276.358-010	SALES AGENT, BUILDING AND CONSTRUCTION EQUIPMENT AND SUPPLIES
		04.06	FOOD DISTRIBUTION	262.358-010	SALES AGENT, FOOD PRODUCTS
282	SALES REPRESENTATIVES, WHOLESALE TRADE	04.12	INDUSTRIAL MARKETING	289.358-014	SALES AGENT, BOTTLES AND BOTTLING EQUIPMENT
				289.158-010	MANUFACTURER'S REPRESENTATIVE
		04.09	HARDWARE, BUILDING MATERIALS, FARM AND GARDEN SUPPLIES AND EQUIPMENT	276.358-010	SALES AGENT, BUILDING AND CONSTRUCTION EQUIPMENT AND SUPPLIES
				276.358-018	SALES AGENT, HARDWARE SUPPLIES
		04.06	FOOD DISTRIBUTION	262.358-010	SALES AGENT, FOOD PRODUCTS
		04.03	AUTOMOTIVE	280.358-018	SALES AGENT, AUTOMOBILE PARTS
283	SALES CLERKS, RETAIL TRADE	04.08	GENERAL MERCHANDISE	290.478-014	SALES CLERK
		04.02	APPAREL AND ACCESSORIES	263.458-022	SALESPERSON, WOMEN'S GARMENTS
				263.358-050	SALESPERSON, SHOE
284	SALES WORKERS, RETAIL TRADE EXCEPT CLERKS	04.03	AUTOMOTIVE	280.358-014	SALES AGENT, AUTOMOBILE
		04.10	HOME FURNISHINGS	274.358-034	SALESPERSON, FURNITURE
				278.358-014	SALES AGENT, HOUSEHOLD EQUIPMENT
				278.358-030	SALESPERSON, TELEVISION AND APPLIANCES
		04.08	GENERAL MERCHANDISE	290.478-014	SALES CLERK
				289.458-014	SALESPERSON, GENERAL
		04.09	HARDWARE, BUILDING MATERIALS, FARM AND GARDEN SUPPLIES AND EQUIPMENT	276.358-010	SALES AGENT, BUILDING AND CONSTRUCTION EQUIPMENT AND SUPPLIES
				276.358-058	SALES AGENT, GENERAL HARDWARE

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
285	SALES WORKERS OF SERVICES AND CONSTRUCTION	04.99	DISTRIBUTIVE EDUCATION, OTHER	257.358-010	SALES AGENT, PUBLIC UTILITIES
		04.08	GENERAL MERCHANDISE	290.478-014	SALES CLERK
		(1)	(1)	293.358-030	TELEPHONE SOLICITOR
	CLERICAL AND KINDRED WORKERS				
370	SECRETARIES, LEGAL	14.0702	SECRETARIES	201.368-010	LEGAL SECRETARY
				201.368-018	SECRETARY
371	SECRETARIES, MEDICAL	14.0702	SECRETARIES	201.368-014	MEDICAL SECRETARY
				201.368-018	SECRETARY
372 (Q)	SECRETARIES, N.E.C.	14.0702	SECRETARIES	201.368-018	SECRETARY
376	STENOGRAPHERS	14.0703	STENOGRAPHERS	202.388-014	STENOGRAPHER
				202.388-010	COURT REPORTER
391	TYPISTS	14.0901	CLERK TYPISTS	209.388-022	CLERK TYPIST
		14.0902	TYPISTS	203.588-018	TYPIST
341	BOOKKEEPING AND BILLING MACHINE OPERATORS	14.0104	MACHINE OPERATORS (BILLING, BOOKKEEPING, AND COMPUTING)	217.388-010	PROOF-MACHINE OPERATOR
				214.488-010	PAYROLL CLERK
				217.388-010	TRANSIT CLERK
		14.0303	GENERAL OFFICE CLERKS	219.388-026	BILLING CLERK II
342	CALCULATING MACHINE OPERATORS	14.0104	MACHINE OPERATORS (BILLING, BOOKKEEPING, AND COMPUTING)	216.488-018	CALCULATING MACHINE OPERATOR
				216.488-010	ADDING MACHINE OPERATOR
343	COMPUTER AND PERIPHERAL EQUIPMENT OPERATORS	14.0201	COMPUTER AND CONSOLE OPERATORS	213.382-018	DIGITAL COMPUTER OPERATOR
		14.0203	PROGRAMMERS	020.188-026	PROGRAMMER, BUSINESS
344	DUPLICATING MACHINE OPERATORS	14.0301	DUPLICATING MACHINE OPERATORS	207.885-010	DUPLICATING MACHINE OPERATOR IV
				207.782-014	DUPLICATING MACHINE OPERATOR II
				207.782-026	OFFSET-DUPLICATING MACHINE OPERATOR
345	KEY PUNCH OPERATORS	14.020201	KEY PUNCH AND CODING EQUIPMENT OPERATOR	213.582-010	KEY PUNCH OPERATORS
		14.0201	COMPUTER AND CONSOLE OPERATORS	213.382-018	DIGITAL COMPUTER OPERATORS
				213.138-010	SUPERVISOR, COMPUTER OPERATIONS
350	TABULATING MACHINE OPERATORS	14.020201	KEY PUNCH AND CODING EQUIPMENT	213.782-010	TABULATING MACHINE OPERATOR
		14.0399	FILING, OFFICE MACHINE, AND GENERAL OFFICE CLERICAL OCCUPATIONS, OTHER	209.688-042	SORTER

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
350	-CONTINUED	14.0104	MACHINE OPERATORS (BILLING, BOOKKEEPING, AND COMPUTING)	216.488-018	CALCULATING MACHINE OPERATOR
355	OFFICE MACHINE OPERATORS, N.E.C.	14.0404	MAIL PREPARING AND MAIL HANDLING MACHINE OPERATORS	234.582-010	ADDRESSING MACHINE OPERATOR
		17.0901	PHOTOGRAPHIC LABORATORY AND DARKROOM OCCUPATIONS	979.381-010	COPY CAMERA OPERATOR
		14.0399	FILING, OFFICE MACHINE, AND GENERAL OFFICE CLERICAL OCCUPATIONS, OTHER	208.885-010	COLLATOR OPERATOR
		14.0303	GENERAL OFFICE CLERKS	219.388-254	SORTING CLERK
301	BANK TELLERS	14.0105	TELLERS	212.368-010	TELLER
303	BILLING CLERKS	14.0303	GENERAL OFFICE CLERKS	219.388-026	BILLING CLERK II
		14.0399	FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL OCCUPATIONS, OTHER	209.588-018	CLERK, GENERAL
305 (P)	BOOKKEEPERS	14.0102	BOOKKEEPERS	210.388 210	BOOKKEEPER
		14.0303	GENERAL OFFICE CLERKS	219.488-010	ACCOUNTING CLERK
310	CASHIERS	04.06	FOOD DISTRIBUTION	299.468-010	CASHIER-CHECKER
		04.08	GENERAL MERCHANDISE	211.468-010	CASHIER II
		14.0103	CASHIERS	211.368-010	CASHIER I
311	CLERICAL ASSISTANTS, SOCIAL WELFARE	14.0399	FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL OCCUPATIONS, OTHER	209.588-018	CLERK, GENERAL
312	CLERICAL SUPERVISORS, N.E.C.	14.0805	OFFICE MANAGERS AND CHIEF CLERKS	169.168-026	CHIEF CLERK II
				169.168-026	MANAGER, OFFICE
		14.0303	GENERAL OFFICE CLERKS	219.388-066	CLERK, GENERAL OFFICE
		14.0201	COMPUTER AND CONSOLE OPERATORS	213.138-010	SUPERVISOR, COMPUTER OPERATIONS
313	COLLECTORS, BILL AND ACCOUNT	04.08	GENERAL MERCHANDISE	240.368-010	COLLECTOR
		14.99	OFFICE OCCUPATIONS, OTHER	240.388-010	COLLECTION CLERK
314	COUNTER CLERKS, EXCEPT FOOD	04.11	HOTEL AND LODGING	242.368-010	HOTEL CLERK
		17.16	FABRIC MAINTENANCE SERVICES, OTHER	369.887-018	MARKER
				369.877-010	LAUNDERETTE ATTENDANT
		(1)	(1)	222.478-010	RETAIL RECEIVING CLERK
315	DISPATCHERS AND STARTERS, VEHICLE	14.0505	TRAFFIC, RATE, AND TRANSPORTATION CLERKS	919.168-010	DISPATCHER, MOTOR VEHICLE
		(1)	(1)	913.168-022	TAXICAB STARTER
		(1)	(1)	849.138-849	DISPATCHER
320	ENUMERATORS AND INTERVIEWERS	14.0499	INFORMATION COMMUNICATION OCCUPATIONS, OTHER	249.268-024	SURVEY WORKER

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Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
321	ESTIMATORS AND INVESTIGATORS, NEC	14.99	OFFICE OCCUPATIONS, OTHER	249.368-010	CLAIMS CLERK
				249.368-034	CREDIT REPORTER
		14.0101	ACCOUNTANTS	160.288-018	ESTIMATOR
323	EXPEDITERS AND PRODUCTION CONTROLLERS	14.0501	PLANNING AND PRODUCTION CLERKS	221.168-010	MATERIAL COORDINATOR
				221.168-022	PRODUCTION COORDINATOR
				221.388-054	PRODUCTION CLERK II
		14.0503	SHIPPING AND RECEIVING CLERKS	222.368-014	EXPEDITER I
325	FILE CLERKS	14.0302	FILE CLERKS	206.388-018	FILE CLERK
		14.0603	PERSONNEL	205.368-026	PERSONNEL CLERK
326	INSURANCE ADJUSTERS, EXAMINERS, AND INVESTIGATORS	04.13	INSURANCE	241.168-010	CLAIMS ADJUSTER
				191.268-018	INVESTIGATOR I
				249.268-010	CLAIM EXAMINER II
		14.0502	QUALITY CONTROL CLERKS	168.288-014	CLAIM EXAMINER I
330	LIBRARY ATTENDANTS AND ASSISTANTS	14.0499	INFORMATION COMMUNICATION OCCUPATIONS, OTHER	249.368-050	LIBRARY ASSISTANT
		(1)	(1)	100.388-014	CLASSIFIER
331	MAIL CARRIERS, POST OFFICE	14.0403	MAIL AND POSTAL CLERKS	233.388-010	MAIL CARRIER
				228.388-014	RURAL MAIL CARRIER
332	MAIL HANDLERS, EXCEPT POST OFFICE	14.0403	MAIL AND POSTAL CLERKS	231.588-014	MAIL CLERK
		14.0499	INFORMATION COMMUNICATION OCCUPATIONS, OTHER	239.587-010	MAILER
333	MESSENGERS AND OFFICE HELPERS	14.0405	MESSENGERS AND OFFICE BOYS AND GIRLS	230.878-022	MESSENGER
				230.878-026	OFFICE HELPER
		14.0499	INFORMATION COMMUNICATION OCCUPATIONS, OTHER	249.388-038	MESSENGER, BANK
		(1)	(1)	299.478-014	DELIVERER, MERCHANDISE
334	METER READERS, UTILITY	14.0499	INFORMATION COMMUNICATION OCCUPATIONS, OTHER	239.588-018	METER READER
360	PAYROLL AND TIMEKEEPING CLERKS	14.0104	MACHINE OPERATORS (BILLING, BOOKKEEPING, AND COMPUTING)	215.488-010	PAYROLL CLERK
		14.0303	GENERAL OFFICE CLERKS	219.388-274	TIMEKEEPER
361	POSTAL CLERKS	14.0403	MAIL AND POSTAL CLERKS	232.368-010	POST OFFICE CLERK
				231.588-014	MAIL CLERK
				231.688-010	DISTRIBUTION CLERK
362	PROOFREADERS	14.0399	FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL OCCUPATIONS, OTHER	209.688-034	PROOFREADER I

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
362	-CONTINUED	14.0102	BOOKKEEPERS	209.688-014	INSURANCE CLERK
363	REAL ESTATE APPRAISERS	04.17	REAL ESTATE	191.287-014	APPRAISER, REAL ESTATE
364	RECEPTIONISTS	14.0406	RECEPTIONISTS AND INFORMATION CLERKS	237.368-038	RECEPTIONIST
374	SHIPPING AND RECEIVING CLERKS	14.0503	SHIPPING AND RECEIVING CLERKS	222.587-042	SHIPPING CLERK
				222.387-026	SHIPPING AND RECEIVING CLERK
				222.387-018	RECEIVING CLERK
375	STATISTICAL CLERKS	14.0303	GENERAL OFFICE CLERKS	219.388-258	STATISTICAL CLERK
				219.388-074	CODING CLERK
				219.488-034	COST CLERK
		14.99	OFFICE OCCUPATIONS, OTHER	249.368-026	COURT CLERK
381	STOCK CLERKS OR STOREKEEPERS	04.20	RETAIL TRADE, OTHER	922.887-070	LABORER, STORES
		14.0504	STOCK AND INVENTORY CLERKS	223.388-014	INVENTORY CLERK
		(1)	(1)	223.387-094	STOCK CLERK
382	TEACHERS' AIDES, EXCEPT SCHOOL MONITORS	(1)	(1)	099.368-010	STUDY SUPERVISOR
383	TELEGRAPH MESSENGERS	14.0405	MESSENGERS AND OFFICE BOYS AND GIRLS	230.868-010	TELEGRAPH MESSENGER I
384	TELEGRAPH OPERATORS	14.0401	COMMUNICATIONS SYSTEMS CLERKS AND OPERATORS	236.588-014	TELEGRAPHER
				235.862-018	INFORMATION OPERATOR
		14.0902	TYPISTS	203.588-014	TELEGRAPHIC-TYPEWRITER OPERATOR
385	TELEPHONE OPERATORS	14.0401	COMMUNICATIONS SYSTEMS CLERKS AND OPERATORS	235.862-026	TELEPHONE OPERATOR
				235.862-010	CENTRAL-OFFICE OPERATOR
				235.138-010	CENTRAL-OFFICE OPERATOR SUPERVISOR
				235.138-014	TELEPHONE OPERATOR CHIEF
390	TICKET STATION AND EXPRESS AGENTS	04.19	TRANSPORTATION	919.368-014	TICKET AGENT
				912.368-022	RESERVATION AGENT
				912.368-026	TRANSPORTATION AGENT
				255.258-010	TRAFFIC AGENT
392	WEIGHERS	(1)	(1)	224.487-026	WEIGHER
		(1)	(1)	920.887-110	PACKAGER, HAND
394	MISCELLANEOUS CLERICAL WORKERS	14.0303	GENERAL OFFICE CLERKS	219.388-066	CLERK, GENERAL
		14.0399	FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL OCCUPATIONS, OTHER	209.588-018	CLERK, GENERAL

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
394	-CONTINUED	14.0499	INFORMATION COMMUNICATIONS OCCUPATIONS, OTHER	249.368-030	CREDIT CLERK I
395	NOT SPECIFIED CLERICAL WORKERS	14.0399	FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL OCCUPATIONS, OTHER	209.588-018	CLERK, GENERAL
		14.0303	GENERAL OFFICE CLERKS	219.388-066	CLERK, GENERAL OFFICE
	CRAFT AND KINDRED WORKERS				
415 (R)	CARPENTERS	17.1001	CARPENTRY	860.381-026	CARPENTER
416	CARPENTER APPRENTICES	17.1001	CARPENTRY	860.381-030	CARPENTER APPRENTICE
410	BRICKMASONS AND STONEMASONS	17.1004	MASONRY	861.381-010	BRICKLAYER
				861.781-022	STONEMASON
411	BRICKMASON AND STONEMASON APPRENTICES	(1)	(1)	861.381-018	BRICKLAYER APPRENTICE
412	BULLDOZER OPERATORS	17.100302	OPERATION, HEAVY EQUIPMENT	850.883-010	BULLDOZER OPERATOR
				859.883-030	OPERATING ENGINEER
		(1)	(1)	929.883-038	TRACTOR OPERATOR
421	CEMENT AND CONCRETE FINISHERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	844.884-014	CEMENT MASON
430	ELECTRICIANS	17.1002	ELECTRICTY	824.281-014	ELECTRICIAN
		17.14	ELECTRICAL OCCUPATIONS	829.281-022	ELECTRICAL REPAIRER
431	ELECTRICIAN APPRENTICES	(1)	(1)	824.281-018	ELECTRICIAN APPRENTICE
436	EXCAVATING, GRADING, AND ROAD MACHINE OPERATORS; EXCEPT BULLDOZER	17.100302	OPERATION, HEAVY EQUIPMENT	859.883-030	OPERATING ENGINEER
				850.883-030	POWER SHOVEL OPERATOR
				851.883-018	MOTOR GRADER OPERATOR
440	FLOOR LAYERS, EXCEPT TILE SETTERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	864.781-010	FLOOR LAYER
		(1)	(1)	864.884-010	FLOOR FINISHER
510	PAINTERS, CONSTRUCTION AND MAINTENANCE	17.1005	PAINTING AND DECORATING	840.781-010	PAINTER
				841.781-010	PAINTER AND DECORATOR APPRENTICE
				840.884-018	PAINTER, ROUGH
511	PAINTER APPRENTICES	17.1005	PAINTING AND DECORATING	841.781-010	PAINTER AND DECORATOR APPRENTICE
512	PAPER HANGERS	17.1005	PAINTING AND DECORATING	841.781-014	PAPER HANGER

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Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
520	PLASTERERS	17.1006	PLASTERING	842.781-018	PLASTERER
521	PLASTERER APPRENTICES	(1)	(1)	842.781-022	PLASTERER APPRENTICE
522	PLUMBERS AND PIPE FITTERS	17.1007	PLUMBING AND PIPE FITTING	862.381-074	PLUMBER
				862.381-042	PIPE FITTER I
523	PLUMBER AND PIPE FITTER APPRENTICES	(1)	(1)	862.381-078	PLUMBER APPRENTICE
		(1)	(1)	862.381-062	PIPE FITTER APPRENTICE
534	ROOFERS AND SLATERS	17.1010	ROOFING	866.381-010	ROOFER
		(1)	(1)	866.381-010	ROOFER
550	STRUCTURAL METAL WORKERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	801.781-010	STRUCTURAL STEEL WORKER
		17.2304	METAL TRADES, COMBINED	619.380-022	METAL FABRICATOR I
560	TILE SETTERS	17.1004	MASONRY	861.781-038	TILE SETTER
				861.781-030	TERRAZZO WORKER
		17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	864.781-010	FLOOR LAYER
441	BLUE-COLLAR WORKER SUPERVISORS N.E.C.	(2)	(2)	(2)	(2)
403	BLACKSMITHS	17.2399	METALWORKING OTHER	610.381-010	BLACKSMITH
		01.0299	AGRICULTURAL SUPPLIES/SERVICES, OTHER	356.381-010	HORSESHOER
404	BOILERMAKERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	805.281-010	BOILERMAKER I
				805.781-010	BOILERMAKER MECHANIC
446	HEAT TREATERS, ANNEALERS, AND TEMPERERS	17.24	METALLURGY	504.782-030	HEAT TREATER
				504.782-010	ANNEALER
				504.782-042	TEMPERER
		16.0114	METALLURGICAL TECHNOLOGY	011.381-010	TESTER
		(1)	(1)	504.885-018	CHARGER OPERATOR
		(1)	(1)	512.883-014	FURNACE CHARGER
442	FORGE AND HAMMER OPERATORS	17.2399	METALWORKING, OTHER	612.381-010	HEAVY FORGER
				610.782-010	DROP-HAMMER OPERATOR
				611.782-010	FORGING-PRESS OPERATOR I
		(1)	(1)	619.886-018	FORGE HELPER
454	JOB AND DIE SETTERS, METAL	17.2302	MACHINE SHOP	600.380-022	JOB SETTER
		17.2304	METAL TRADES, COMBINED	616.380-026	MACHINE SETTER
		(1)	(1)	612.380-010	DIE SETTER
461	MACHINISTS	17.2302	MACHINE SHOP	600.280-030	MACHINIST I
462	MACHINIST APPRENTICES	17.2302	MACHINE SHOP	600.280-034	MACHINIST APPRENTICE

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
502	MILLWRIGHTS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	638.281-034	MILLWRIGHT
503	MOLDERS, METAL	17.2301	FOUNDRY	518.381-022	MOLDER
		(1)	(1)	518.782-010	MACHINE MOLDER
504	MOLDER APPRENTICES	17.2301	FOUNDRY	518.381-026	MOLDER APPRENTICE
514	PATTERN AND MODEL MAKERS, EXCEPT PAPER	17.2302	MACHINE SHOP	600.280-066	PATTERNMAKER, METAL
				809.781-010	LAY-OUT PLANNER II
533	ROLLERS AND FINISHERS, METAL	17.2399	METALWORKING, OTHER	613.782-050	ROLLER, PRIMARY MILL
				705.887-014	LABORER, GRINDING AND POLISHING
		(1)	(1)	705.887-014	LABORER, GRINDING AND POLISHING
535	SHEET METAL WORKERS AND TINSMITHS	17.2305	SHEET METAL	804.281-010	SHEET METAL WORKER
536	SHEETMETAL APPRENTICES	17.2305	SHEET METAL	804.281-014	SHEET METAL WORKER APPRENTICE
561	TOOL AND DIE MAKERS	17.2307	TOOL AND DIE MAKING	601.280-062	TOOL AND DIE MAKER
				601.280-058	TOOL MAKER
				601.281-010	DIE MAKER, BENCH, STAMPING
562	TOOL AND DIE MAKER APPRENTICES	17.2307	TOOL AND DIE MAKING	601.280-066	TOOL AND DIE MAKER APPRENTICE
470	AIR CONDITIONING, HEATING, AND REFRIGERATION MECHANICS AND REPAIRERS	17.0101	COOLING	637.281-034	REFRIGERATION MECHANIC, COMMERCIAL
		17.01	AIR CONDITIONING	637.281-010	AIR CONDITIONING MECHANIC, COMMERCIAL
				637.281-014	AIR CONDITIONING MECHANIC, DOMESTIC
		17.0102	HEATING	869.281-010	FURNACE INSTALLER AND REPAIRER, HOT AIR
471	AIRCRAFT MECHANICS AND REPAIRERS	17.0401	AIRCRAFT MAINTENANCE	621.281-010	AIRCRAFT-AND-ENGINE MECHANIC
401	AUTOMOBILE ACCESSORY INSTALLER	17.35	UPHOLSTERING	780.381-010	AUTOMOBILE UPHOLSTERER
		17.0303	SPECIALIZATION, OTHER	807.884-050	MUFFLER INSTALLER
472	AUTOMOBILE BODY REPAIRERS	17.0301	BODY AND FENDER	807.381-010	AUTOMOBILE BODY REPAIRER
		17.0302	MECHANICS	620.281-014	AUTOMOBILE MECHANIC
473 (S)	AUTOMOBILE MECHANICS	17.0302	MECHANICS	620.281-014	AUTOMOBILE MECHANIC
				620.281-014	AUTOMOBILE SERVICE MECHANIC I
474	AUTOMOBILE MECHANIC APPRENTICES	(1)	(1)	620.281-030	AUTOMOBILE MECHANIC APPRENTICE
475	DATA PROCESSING MACHINE REPAIRERS	16.0108	ELECTRONIC TECHNOLOGY	828.281-022	ELECTRONICS MECHANIC
		17.06	BUSINESS MACHINE MAINTENANCE	633.281-030	OFFICE MACHINE SERVICER

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
475	-CONTINUED	(1)	(1)	633.281-042	STATISTICAL MACHINE SERVICER
480	FARM IMPLEMENT MECHANICS AND REPAIRERS	01.0301	AGRICULTURAL POWER AND MACHINERY	624.281-010	FARM EQUIPMENT MECHANIC I
				620.281-094	TRACTOR MECHANIC
		17.0302	MECHANICS	620.281-014	AUTOMOBILE MECHANIC
481	HEAVY EQUIPMENT MECHANICS INCLUDING DIESEL	17.0302	MECHANICS	620.281-014	AUTOMOBILE MECHANIC
		17.100301	MAINTENANCE, EQUIPMENT	620.281-058	ENGINEERING EQUIPMENT MECHANIC
		(1)	(1)	638.281-022	MAINTENANCE SPECIALIST, GAS PLANT
		(1)	(1)	899.281-018	MAINTENANCE SPECIALIST, FACTORY OR MILL
482	HOUSEHOLD APPLIANCE AND ACCESSORY INSTALLERS AND MECHANICS	17.0201	ELECTRICAL APPLIANCES	723.884-010	APPLIANCE REPAIRER
				827.281-014	ELECTRIC APPLIANCE SERVICER
		17.0202	GAS APPLIANCES	637.281-022	GAS APPLIANCE SERVICER
		17.02	APPLIANCE REPAIR	827.281-022	HOUSEHOLD APPLIANCE REPAIRER
483	LOOM FIXERS	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	638.280-018	LOOM FIXER
				638.280-014	LOOM FIXER OVERSEER
484	OFFICE MACHINE REPAIRERS	17.06	BUSINESS MACHINE MAINTENANCE	633.281-030	OFFICE MACHINE SERVICER
		04.12	INDUSTRIAL MARKETING	289.158-010	MANUFACTURERS' REPRESENTATIVE
485	RADIO AND TELEVISION REPAIRERS	17.1503	RADIO/ TELEVISION	720.281-018	TELEVISION SERVICER AND REPAIRER
		16.0108	ELECTRONIC TECHNOLOGY	828.281-022	ELECTRONICS MECHANIC
		(1)	(1)	823.281-030	RADIO MECHANIC
486	RAILROAD AND CAR SHOP REPAIRERS	17.12	DIESEL MECHANIC	625.281-010	DIESEL MECHANIC
		(1)	(1)	622.381-014	CAR REPAIRER
491	MECHANICS, EXCEPT AUTO REPAIRERS	17.22	MARITIME OCCUPATIONS	623.884-010	MOTORBOAT MECHANIC HELPER
		(1)	(1)	638.281-022	MAINTENANCE MECHANIC
		(1)	(1)	638.884-010	MAINTENANCE MECHANIC HELPER
492	MISCELLANEOUS MECHANICS AND REPAIRERS	17.2101	INSTRUMENTS (OTHER THAN WATCHES AND CLOCKS)	710.281 058	INSTRUMENT REPAIRER I
		17.31	SMALL ENGINE REPAIR, INTERNAL COMBUSTION	620.281-086	MOTORCYCLE REPAIRER
		(1)	(1)	639.381-014	VENDING MACHINE REPAIRER
		(1)	(1)	639.884-014	LAWN MOWER REPAIRER
495	NOT SPECIFIED MECHANICS AND REPAIRERS	(1)	(1)	638.281-022	MAINTENANCE MECHANIC
		(1)	(1)	899.281-018	MAINTENANCE SPECIALIST, FACTORY OR MILL

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Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
495	-CONTINUED	(1)	(1)	629.281-022	DAIRY EQUIPMENT REPAIRER
405	BOOKBINDERS	(1)	(1)	643.885-010	BINDERY WORKER
		(1)	(1)	977.781-010	BOOKBINDER, HAND
		(1)	(1)	977.884-014	BOOKBINDER
422	COMPOSITORS AND TYPESETTERS	17.1901	COMPOSITION, MAKEUP, AND TYPESETTING	973.381-010	COMPOSITOR I
				973.381-026	JOB PRINTER
434	ELECTROTYPERS AND STEREOTYPERS	17.0901	COMPOSITION, MAKEUP, AND TYPESETTING	974.381-010	ELECTROTYPER
		(1)	(1)	975.782-014	STEREOTYPER
435	ENGRAVERS, EXCEPT PHOTOENGRAVERS	17.2399	METALWORKING, OTHER	704.381-026	ENGRAVER, DECORATIVE
				704.884-018	ENGRAVER, PANTOGRAPH I
		(1)	(1)	704.381-022	ENGRAVER APPRENTICE, DECORATIVE
515	PHOTOENGRAVERS AND LITHOGRAPHERS	17.1904	PHOTOENGRAVING	971.381-018	PHOTOENGRAVER
				971.281-014	LITHOGRAPHER
		17.1903	LITHOGRAPHY, PHOTOGRAPHY, AND PLATEMAKING	972.382-010	PHOTOENGRAVER, LITHOGRAPHIC
		17.2399	METALWORKING, OTHER	704.884-030	ETCHER
530	PRINTING PRESS OPERATORS	17.1902	PRINTING PRESS OCCUPATIONS	651.782-042	OFFSET-PRESS OPERATOR
				651.782-010	CYLINDER-PRESS OPERATOR
				651.782-094	WEB-PRESS OPERATOR
531	PRINTING PRESS APPRENTICES	17.1902	PRINTING PRESS OCCUPATIONS	651.782-014	CYLINDER-PRESS OPERATOR APPRENTICE
423	PRINTING TRADES APPRENTICES, EXCEPT PRINTING PRESS	17.1902	PRINTING PRESS OCCUPATIONS	651.782-046	OFFSET-PRESS APPRENTICE
		17.1901	COMPOSITION, MAKEUP, AND TYPESETTING	973.381-030	JOB PRINTER APPRENTICE
433	ELECTRIC POWER LINE AND CABLE INSTALLERS AND REPAIRERS	17.1402	LINEMAN	821.281-010	LINE MAINTAINER
				821.381-034	LINE ERECTOR
				821.381-042	LINE REPAIRER
				829.381-010	CABLE SPLICER
				822.281-026	MAINTENANCE MECHANIC, TELEPHONE
		(1)	(1)	821.381-026	ELECTRIC-METER TESTER
455	LOCOMOTIVE ENGINEERS	(1)	(1)	910.383-014	LOCOMOTIVE ENGINEER
456	LOCOMOTIVE ENGINEER HELPER	(1)	(1)	910.383-010	FIRER, LOCOMOTIVE
525	POWER STATION OPERATORS	17.32	STATIONARY ENERGY SOURCES OCCUPATIONS	950.782-054	STATIONARY ENGINEER
		(1)	(1)	952.782-046	SUBSTATION OPERATOR APPRENTICE

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Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
552	TELEPHONE INSTALLERS AND REPAIRERS	17.1501	COMMUNICATIONS	822.381-050	STATION INSTALLER
				822.281-014	CENTRAL OFFICE REPAIRER
				822.281-050	PRIVATE-BRANCH-EXCHANGE REPAIRER
				822.381-034	PRIVATE-BRANCH-EXCHANGE INSTALLER
		(1)	(1)	822.884-014	FRAME WIRER
		(1)	(1)	822.884-010	CABLE INSTALLER
554	TELEPHONE LINE INSTALLERS AND REPAIRERS	17.1402	LINEMAN	829.381-010	CABLE SPLICER
				822.381-026	MAINTENANCE MECHANIC, TELEPHONE
				821.281-010	LINE MAINTAINER
		17.1401	INDUSTRIAL ELECTRICITY	821.281-022	ELECTRIC METER INSTALLER
		(1)	(1)	829.131-010	CABLE SUPERVISOR
402	BAKERS	17.2901	BAKER	526.781-010	BAKER
				313.781-010	BAKER
				313.381-034	COOK, PASTRY
413	CABINETMAKERS	17.3601	MILLWORK AND CABINETMAKING	660.280-010	CABINETMAKER
420	CARPET INSTALLERS	(1)	(1)	299.381-014	CARPET LAYER
424	CRANE, DERRICK, AND HOIST OPERATORS	17.100302	OPERATION, HEAVY EQUIPMENT	921.883-110	TRUCK-CRANE OPERATOR
				859.883-030	OPERATING ENGINEER
		(1)	(1)	921.883-050	ELECTRIC BRIDGE OR GANTRY CRANE OPERATOR
425	DECORATORS AND WINDOW DRESSERS	04.05	FLORISTRY	142.081-050	FLORAL DESIGNER
		04.01	ADVERTISING SERVICES	298.081-010	MERCHANDISE DISPLAYER
				142.031-010	MANAGER, DISPLAY
		17.0701	INTERIOR DECORATING	142.051-014	INTERIOR DESIGNER AND DECORATOR
426	DENTAL LABORATORY TECHNICIAN	07.0103	DENTAL LABORATORY TECHNICIAN	712.381-014	DENTAL LABORATORY TECHNICIAN
		07.0101	DENTAL ASSISTING	079.378-010	DENTAL ASSISTANT
443	FURNITURE AND WOOD FINISHERS	(1)	(1)	763.381-010	FURNITURE FINISHER
		(1)	(1)	741.887-026	PAINTER HELPER, SPRAY
		(1)	(1)	742.884-010	RUBBER
444	FURRIERS	(1)	(1)	142.081-058	FURRIER
445	GLAZIERS	17.1009	GLAZING	865.781-010	GLAZIER
				865.884-014	GLASS INSTALLER
450	INSPECTORS, SCALERS, AND GRADERS; LOG AND LUMBER	(1)	(1)	669.587-010	GRADER
		(1)	(1)	669.587-014	VENEER GRADER
452	INSPECTORS, N.E.C.	17.24	METALLURGY	619.381-014	INSPECTOR

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Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
452	-CONTINUED	(1)	(1)	910.287-014	RAILROAD CAR INSPECTOR
		(1)	(1)	182.287-022	HIGHWAY INSPECTOR
453	JEWELERS AND WATCHMAKERS	17.2102	WATCHMAKING AND REPAIR	715.281-030	WATCHMAKER
		(1)	(1)	700.281-010	JEWELER
501	MILLERS; GRAIN, FLOUR, SEED	04.06	FOOD DISTRIBUTION	262.358-010	SALES AGENT, FOOD PRODUCTS
		(1)	(1)	521.782-042	GRINDER OPERATOR
505	MOTION PICTURE PROJECTIONISTS	(1)	(1)	960.382-010	MOTION PICTURE PROJECTIONISTS
506	OPTICIANS, AND LENS GRINDERS AND POLISHERS	17.2101	INSTRUMENTS (OTHER THAN WATCHES AND CLOCKS)	713.381-014	OPTICIAN
				711.781-018	LENS GRINDER
		07.0601	OPHTHALMIC DISPENSING	713.251-010	OPTICIAN, DISPENSING
516	PIANO AND ORGAN TUNERS AND REPAIRERS	(1)	(1)	730.381-050	PIANO TUNER
540	SHIPFITTERS	(1)	(1)	806.381-042	SHIPFITTER
		(1)	(1)	806.887-026	SHIPFITTER HELPER
542	SHOE REPAIRERS	17.3402	SHOE REPAIR	365.381-014	SHOE REPAIRER
		17.3401	SHOE MANUFACTURING	788.381-010	COBBLER
543	SIGN PAINTERS AND LETTERERS	(1)	(1)	970.381-046	PAINTER, SIGN
545	STATIONARY ENGINEERS	17.32	STATIONARY ENERGY SOURCES OCCUPATIONS	950.782-054	STATIONARY ENGINEER
546	STONE CUTTERS AND STONE CARVERS	(1)	(1)	771.381-014	STONE CUTTER, HAND
551	TAILORS	17.3302	TAILORING	785.281-010	ALTERATION TAILOR
		17.16	FABRIC MAINTENANCE SERVICES	782.884-078	MENDER
		(1)	(1)	785.261-014	TAILOR APPRENTICE, CUSTOM
563	UPHOLSTERERS	17.34	LEATHERWORKING	780.884-138	UPHOLSTERER II
		17.35	UPHOLSTERING	780.381-018	FURNITURE UPHOLSTERER
575	CRAFT AND KINDRED WORKERS, N.E.C.	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	781.884-026	CUTTER, HAND
		(1)	(1)	699.782-022	DIE CUTTER
		(1)	(1)	892.883-014	LABORER, HOISTING
571	SPECIFIED CRAFT APPRENTICES,N.E.C.	17.3601	MILLWORK AND CABINET MAKING	660.280-014	CABINET MAKER APPRENTICE
		(1)	(1)	821.381-038	LINE ERECTOR APPRENTICE
		(1)	(1)	801.781-014	STRUCTURAL STEEL WORKER APPRENTICE
		(1)	(1)	693.281-018	PATTERNMAKER, METAL, BENCH
		(1)	(1)	806.281-038	RIGGER APPRENTICE
		(1)	(1)	950.782-058	STATIONARY ENGINEER APPRENTICE

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Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
572	NOT SPECIFIED APPRENTICES	14.0401	COMMUNICATIONS SYSTEMS CLERKS AND OPERATORS	235.862-026	TELEPHONE OPERATOR
580	FORMER MEMBERS OF THE ARMED FORCES	(3)	(3)	(3)	(3)
	OPERATIVES				
650	DRILL PRESS OPERATORS	17.2303	MACHINE TOOL OPERATION	606.782-018	DRILL PRESS OPERATOR, PRODUCTION
				606.782-026	DRILL PRESS SET-UP OPERATOR, SINGLE SPINDLE
				606.380-014	DRILL PRESS SET-UP OPERATOR, RADIAL
622	FURNACE TENDERS, SMELTERS, AND POURERS, METAL	17.2301	FOUNDRY	512.782-026	FURNACE OPERATOR
				514.884-030	POURER, METAL
				502.782-018	CASTER
				514.884-034	TAPPER
651	GRINDING MACHINE OPERATIVES	17.2303	MACHINE TOOL OPERATION	603.280-038	TOOL GRINDER OPERATOR
		17.2399	METALWORKING, OTHER	705.884-046	GRINDER I
		17.2303	MACHINE TOOL OPERATION	603.885-078	GRINDER OPERATOR, PRODUCTION
626	HEATERS, METAL	(1)	(1)	613.782-026	HEATER
652	LATHE AND MILLING MACHINE OPERATIVES	17.2303	MACHINE TOOL OPERATION	604.885-034	LATHE OPERATOR, PRODUCTION
				604.380-042	TURRET-LATHE SET-UP OPERATOR
635	METAL PLATERS	17.2399	METALWORKING, OTHER	500.380-010	PLATER
				609.380-014	METAL SPRAYER, MACHINED PARTS
		(1)	(1)	500.884-030	PLATER
		(1)	(1)	500.885-014	PLATER, PRODUCTION
653	OTHER PRECISION MACHINE OPERATIVES	17.2303	MACHINE TOOL OPERATION	604.885-042	SCREW MACHINE OPERATOR, PRODUCTION
				606.280-010	BORING-MACHINE SET-UP OPERATOR, JIG
				606.280-014	BORING-MILL SET-UP OPERATOR, HORIZONTAL
				600.280-030	MACHINIST I
		(1)	(1)	606.885-018	BORING MACHINE OPERATOR, PRODUCTION
656	PUNCH AND STAMPING PRESS OPERATIVES	17.2303	MACHINE TOOL OPERATION	615.782-034	PUNCH PRESS OPERATOR I
		17.2304	METAL TRADES, COMBINED	617.280-018	PRESS OPERATOR, HEAVY DUTY
				619.885-070	MACHINE OPERATOR
				619.885-026	BRAKE OPERATOR II
665	SOLDERERS	17.230604	BRAZING AND SOLDERING	814.884-026	SOLDERER, PRODUCTION LINE
		(1)	(1)	706.884-098	SOLDERER ASSEMBLER
		(1)	(1)	700.781-018	SOLDERER
660	WELDERS AND FLAME CUTTERS	17.230603	COMBINATION WELDING	812.884-014	WELDER, COMBINATION

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Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

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		CODE	PROGRAM TITLE	CODE	TITLE
680	-CONTINUED	17.230602	ELECTRIC WELDING	810.884-018	WELDER, ARC
				810.782-022	WELDER, SPOT I
670	CARDING, LAPPING, AND COMBING OPERATIVES	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	680.885-014	CARD TENDER
				683.280-018	LOOM FIXER
				683.885-018	DRAWER-IN, HAND
				683.887-010	DRAWER-IN, HELPER, HAND
		(1)	(1)	680.885-090	SLUBBER TENDER
		(1)	(1)	683.782-022	DRAWING-IN MACHINE TENDER
671	KNITTERS, LOOPERS, AND TOPPERS	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	685.885-026	KNITTING MACHINE OPERATOR
		(1)	(1)	685.885-030	KNITTING MACHINE OPERATOR
672	SPINNERS, TWISTERS, AND WINDERS	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	682.885-018	SPINNER, FRAME
				681.885-138	YARN WINDER
		(1)	(1)	689.885-162	WINDER OPERATOR AUTOMATIC
		(1)	(1)	689.886-030	DOFFER
		(1)	(1)	557.885-030	SPINNER
673	WEAVERS	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	683.782-042	WEAVER
				683.885-046	WEAVER, NEEDLE LOOM
		(1)	(1)	683.885-034	SMASH, HAND
674	OTHER TEXTILE OPERATIVES	(1)	(1)	589.885-014	BOARDING MACHINE OPERATORS
610	CHECKERS, EXAMINERS, AND INSPECTORS, MANUFACTURING	09.0202	CLOTHING MANAGEMENT, PRODUCTION, AND SERVICES	789.687-034	GARMENT INSPECTOR
		(1)	(1)	609.684-010	INSPECTOR, GENERAL
624	GRADERS AND SORTERS, MANUFACTURING	14.0503	SHIPPING AND RECEIVING CLERKS	222.687-034	SORTER
		17.08	COMMERCIAL FISHERY OCCUPATIONS	589.687-014	GRADER
		(1)	(1)	529.687-054	SORTER, AGRICULTURAL PRODUCE
		(1)	(1)	223.687-022	SCALER
634	MEAT WRAPPERS, RETAIL TRADE	(1)	(1)	920.887-110	PACKAGER, HAND
		(1)	(1)	920.885-110	PACKAGER, MACHINE
		(1)	(1)	223.684-010	MEAT CLERK
643	PACKERS AND WRAPPERS, EXCEPT MEAT AND PRODUCE	(1)	(1)	920.887-110	PACKAGER, HAND
		(1)	(1)	920.885-110	PACKAGER, MACHINE
625	PRODUCE GRADERS AND PACKERS, EXCEPT FACTORY AND FARM	(1)	(1)	920.887-118	PACKER, AGRICULTURAL PRODUCE

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Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
601	ASBESTOS AND INSULATION WORKERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	863.884-026	INSULATION WORKER
				863.884-022	INSULATION INSTALLER
				863.781-014	INSULATION BLANKET MAKER
602 (T)	ASSEMBLERS	(1)	(1)	706.887-010	ASSEMBLER, PRODUCTION
		(1)	(1)	706.884-022	ASSEMBLER, SMALL PARTS
		(1)	(1)	723.884-014	ASSEMBLER
603	BLASTERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	859.281-010	BLASTER
		(1)	(1)	931.281-110	BLASTER
604	BOTTLING AND CANNING OPERATIVES	(1)	(1)	920.885-110	PACKAGER, MACHINE
605	SURVEYOR HELPERS	(1)	(1)	018.587-010	SURVEYOR HELPER, ROD
		(1)	(1)	018.687-010	SURVEYOR HELPER, CHAIN
611	CLOTHING IRONERS AND PRESSERS	17.16	FABRIC MAINTENANCE SERVICES	363.782-018	PRESSER, MACHINE
				363.884-022	PRESSER, HAND
		17.1602	LAUNDERING	363.885-026	SHIRT PRESSER
612	CUTTING OPERATIVES, N.E.C.	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	781.887-078	TRIMMER, HAND
				781.884-030	CUTTER, MACHINE I
		17.2303	MACHINE TOOL OPERATION	615.782-050	SHEAR OPERATOR, I
613	DRESSMAKERS	09.0202	CLOTHING MANAGEMENT, PRODUCTION, AND SERVICES	785.381-018	SEAMSTRESS
				785.361-010	DRESSMAKER
		17.3302	TAILORING	785.281-010	ALTERATION TAILOR
		17.3301	DRESSMAKING	785.381-026	WOMEN'S GARMENT ALTERER (M/F)
614	DRILLERS, EARTH	17.100302	OPERATION, HEAVY EQUIPMENT	859.782-034	WELL-DRILL OPERATOR, ROTARY DRILL
		(1)	(1)	930.782-038	DRILLING MACHINE OPERATOR
		(1)	(1)	930.886-018	DRILLER HELPER
615	DRYWALL INSTALLERS AND LATHERS	17.1008	DRY WALL INSTALLATION	842.884-010	DRY-WALL APPLICATOR
				842.884-022	DRY-WALL TAPER
		17.1006	PLASTERING	842.781-010	LATHER
620	DYERS	17.3399	TEXTILE PRODUCTION AND FABRICTION, OTHER	582.782-018	DYE-RANGE OPERATOR
				580.885-062	SKEIN-YARN DYER
		17.1699	FABRIC MAINTENANCE SERVICES, OTHER	364.887-010	DYER HELPER
				364.887-018	RUG-DYER HELPER
		(1)	(1)	582.885-110	DYE-TUB OPERATOR

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Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
621	FILERS, POLISHERS, SANDERS, AND BUFFERS	17.2399	METALWORKING, OTHER	705.884-070	POLISHER
623	GARAGE WORKERS AND GAS STATION ATTENDANTS	04.16	PETROLEUM	915.867-010	AUTOMOBILE SERVICE STATION ATTENDANT
		(1)	(1)	915.884-014	TIRE REPAIRER
630	LAUNDRY AND DRY CLEANING OPERATIVES N.E.C.	17.1602	LAUNDERING	361.887-010	LAUNDRY LABORER
				369.887-010	FOLDER
				361.885-034	WASHER, MACHINE
				361.885-022	LAUNDRY WORKER II
				369.884-022	LAUNDRY OPERATOR
		17.16	FABRIC MAINTENANCE SERVICES	369.687-010	ASSEMBLER
				369.687-018	INSPECTOR
		17.1601	DRY CLEANING	369.884-026	RUG CLEANER, HAND
631	MEAT CUTTERS AND BUTCHERS, EXCEPT MANUFACTURING	17.2903	MEAT CUTTER	316.884-018	MEAT CUTTER
633	MEAT CUTTERS AND BUTCHERS, MANUFACTURING	01.0401	FOOD PRODUCTS	525.381-010	BUTCHER, ALL-ROUND
		17.08	COMMERCIAL FISHERY OCCUPATIONS	525.884-030	FISH CLEANER
		17.2903	MEAT CUTTER	316.884-018	MEAT CUTTER
		(1)	(1)	525.884-010	BONER, MEAT
		(1)	(1)	525.887-134	TRIMMER, MEAT
636	MILLINERS	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	784.281-010	MILLINER
640	MINE OPERATIVES, N.E.C.	(1)	(1)	939.281-010	MINER
		(1)	(1)	932.883-026	SHUTTLE-CAR OPERATOR
		(1)	(1)	939.887-018	COMPANY LABORER
		(1)	(1)	869.884-066	ROUSTABOUT
641	MIXING OPERATIVES	01.0202	FEEDS	520.885-122	FEED MIXER
		(1)	(1)	550.782-042	MIXER
		(1)	(1)	550.885-162	MIXER OPERATOR
		(1)	(1)	550.885-186	PAINT MIXER, MACHINE
642	OILERS AND GREASERS, EXCEPT AUTO	(1)	(1)	699.887-018	OILER
644	PAINTERS, MANUFACTURED ARTICLES	17.0301	BODY AND FENDER	845.781-018	PAINTER, AUTOMOBILE
		17.1005	PAINTING AND DECORATING	840.781-010	PAINTER AND DECORATOR APPRENTICE
		(1)	(1)	741.884-026	PAINTER, SPRAY
		(1)	(1)	741.887-030	PAINTER, SPRAY

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Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

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		CODE	PROGRAM TITLE	CODE	TITLE
659	PHOTOGRAPHIC PROCESS WORKERS	17.0901	PHOTOGRAPHIC LABORATORY AND DARKROOM OCCUPATIONS	976.381-010	DEVELOPER
				970.281-026	PHOTOGRAPH RETOUCHER
				976.886-010	PHOTOGRAPH FINISHER I
660	RIVETERS AND FASTENERS	(1)	(1)	692.885-250	STAPLING-MACHINE OPERATOR
		(1)	(1)	699.782-026	RIVETING-MACHINE OPERATOR
		(1)	(1)	709.884-070	RIVETER, HAND
		(1)	(1)	669.885-042	CORRUGATED FASTENER DRIVE
		(1)	(1)	669.885-066	NAILING-MACHINE OPERATOR, AUTO
		(1)	(1)	800.884-018	RIVETER, PNEUMATIC
661	SAILORS AND DECKHANDS	17.0801	SEAMANSHIP	911.887-022	DECKHAND
				911.884-010	ABLE SEAMAN
				911.887-034	ORDINARY SEAMAN
662	SAWYERS	17.3601	MILLWORK AND CABINET MAKING	667.782-038	CUT-OFF-SAW OPERATOR
		17.3699	WOODWORKING, OTHER	667.782-114	SAWMILL WORKER
		17.2303	MACHINE TOOL OPERATION	607.782-014	DO-ALL-SAW OPERATOR
		(1)	(1)	940.884-010	BUCKER
663	SEWERS AND STITCHERS	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	786.782-090	SEWING MACHINE OPERATOR, REGULAR EQUIPMENT
				787.782-294	SEWING MACHINE OPERATOR, REGULAR
664	SHOEMAKING MACHINE OPERATIVES	17.3401	SHOE MANUFACTURING	690.885-370	SKIVER, MACHINE
				788.887-026	CEMENTER, HAND
666	FURNACE TENDERS AND STOKERS, EXCEPT METAL	17.32	STATIONARY ENERGY SOURCES OCCUPATIONS	951.885-014	FIRER, HIGH PRESSURE
				951.885-018	FIRER, LOW PRESSURE
681	WINDING OPERATIVES, N.E.C.	17.1403	MOTOR REPAIRMEN	721.884-034	ELECTRIC MOTOR WINDER
		(1)	(1)	724.884-058	COILWINDER, HAND
		(1)	(1)	640.885-062	REWINDER OPERATOR
690	MACHINE OPERATIVES, MISCELLANEOUS SPECIFIED	(2)	(2)	(2)	(2)
692	MACHINE OPERATIVES, NOT SPECIFIED	(2)	(2)	(2)	(2)
694	MISCELLANEOUS OPERATIVES	(2)	(2)	(2)	(2)
695	NOT SPECIFIED OPERATIVES	17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	787.782-290	SEWING MACHINE OPERATOR, ALL-AROUND
701	BOAT OPERATORS	17.0802	SHIP AND BOAT OPERATION AND MAINTENANCE	911.883-026	MOTORBOAT OPERATOR
703	BUS DRIVERS	04.19	TRANSPORTATION	913.463-010	BUS DRIVER

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Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

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		CODE	PROGRAM TITLE	CODE	TITLE
703	-CONTINUED	(1)	(1)	913.463-014	BUS DRIVER, SCHOOL
704	CONDUCTORS AND OPERATORS, URBAN RAIL TRANSIT	(1)	(1)	910.868-014	CONDUCTOR
		(1)	(1)	910.863-026	CAR-RETARDER OPERATOR
705	DELIVERY AND ROUTE WORKERS	04.06	FOOD DISTRIBUTION	292.358-010	DRIVER, SALES ROUTE
		(1)	(1)	906.883-026	TRUCK DRIVER, LIGHT
706	FORK LIFT AND TOW MOTOR OPERATORS	(1)	(1)	922.883-018	INDUSTRIAL TRUCK OPERATOR
710	RAIL VEHICLE OPERATORS N.E.C.	17.3202	PUMPING PLANTS	914.782-014	OIL PUMPER
		(1)	(1)	919.883-030	DINKEY OPERATOR
		(1)	(1)	922.885-030	DUMP OPERATOR
711	PARKING ATTENDANTS	04.03	AUTOMOTIVE	915.878-014	PARKING LOT ATTENDANT
712	RAILROAD BRAKE OPERATORS AND COUPLERS	(1)	(1)	910.884-010	BRAKE COUPLER, ROAD FREIGHT
		(1)	(1)	910.884-014	YARD COUPLER
		(1)	(1)	932.884-010	BRAKE HOLDER
		(1)	(1)	910.364-010	BRAKER, PASSENGER TRAIN
713	RAILROAD SWITCH OPERATORS	(1)	(1)	910.887-038	SWITCH TENDER
714	TAXICAB DRIVERS AND CHAUFFEURS	04.19	TRANSPORTATION	913.463-018	TAXI DRIVER
		(1)	(1)	913.883-014	CHAUFFEUR
		(1)	(1)	913.883-010	AMBULANCE DRIVER
715 (U)	TRUCK DRIVERS	(1)	(1)	905.883-022	TRUCK DRIVER, HEAVY
		(1)	(1)	906.883-026	TRUCK DRIVER, LIGHT
		(1)	(1)	904.883-024	TRACTOR-TRAILER-TRUCK DRIVER
	SERVICE WORKERS				
901	LODGING QUARTERS CLEANERS, EXCEPT PRIVATE HOUSEHOLD	09.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	323.887-014	MAID II
				306.878-010	HOMEMAKER
		17.11	CUSTODIAL SERVICES	381.887-014	CHARWORKER
902	BUILDING INTERIOR CLEANERS, NEC	17.11	CUSTODIAL SERVICES	381.887-014	CHARWORKER
				381.887-026	PORTER I
				381.887-030	PORTER II
		09.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	323.887-018	MAID, HOSPITAL
				306.878-010	HOMEMAKER
903 (X)	JANITORS AND SEXTONS	17.11	CUSTODIAL SERVICES	381.887-026	PORTER

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		CODE	PROGRAM TITLE	CODE	TITLE
903	-CONTINUED	17.11	-CONTINUED	382.884-010	JANITOR
		17.10	CONSTRUCTION AND MAINTENANCE TRADES	899.381-010	MAINTENANCE REPAIRER, BUILDING
		(1)	(1)	899.281-018	MAINTENANCE REPAIRER, FACTORY OR MILL
910	BARTENDERS	(1)	(1)	312.878-014	BARTENDER
911	WAITER'S ASSISTANTS	17.2904	WAITER/WAITRESS	311.878-010	DINING ROOM ATTENDANT
912	COOKS, EXCEPT PRIVATE HOUSEHOLD	17.2902	COOK/CHEF	313.381-018	COOK
				314.381-010	COOK, SHORT ORDER
				315.381-010	COOK
		(1)	(1)	313.381-038	COOK, SCHOOL CAFETERIA
913	DISHWASHERS	(1)	(1)	318.887-010	KITCHEN HELPER
		(1)	(1)	318.887-014	FORMULA-ROOM WORKER
914	FOOD COUNTER AND FOUNTAIN WORKERS	17.2904	WAITER/WAITRESS	311.878-026	COUNTER ATTENDANT, LUNCHROOM OR COFFEE SHOP
				319.878-010	FOUNTAIN SERVER
				311.878-058	WAITER/WAITRESS, INFORMAL
		(1)	(1)	311.878-022	COUNTER ATTENDANT, CAFETERIA
915 (1)	WAITERS	17.2904	WAITER/WAITRESS	311.878-058	WAITER/WAITRESS, INFORMAL
				311.878-054	WAITER/WAITRESS, FORMAL
916	FOOD SERVICE WORKERS, N.E.C., EXCEPT PRIVATE HOUSEHOLD	17.2902	COOK/CHEF	317.887-010	COOK HELPER I
				317.884-018	PANTRY
		(1)	(1)	318.887-010	KITCHEN HELPER
		(1)	(1)	311.878-022	COUNTER ATTENDANT, CAFETERIA
		(1)	(1)	317.884-014	DELI-CUTTER SLICER
921	DENTAL ASSISTANTS	07.0101	DENTAL ASSISTING	079.378-010	DENTAL ASSISTANT
922	HEALTH AIDES, EXCEPT NURSING	07.0904	MEDICAL ASSISTANT (PHYSICIAN'S OFFICE)	079.368-022	MEDICAL ASSISTANT
		07.0402	PHYSICAL THERAPY	355.878-014	ATTENDANT, PHYSICAL THERAPY
		(1)	(1)	355.878-046	TRAY-LINE WORKER
		(1)	(1)	079.588-010	DIET CLERK
		(1)	(1)	074.387-010	PHARMACY HELPER
		(1)	(1)	079.378-038	PODIATRIST'S ASSISTANT
923	HEALTH TRAINEES	07.0301	NURSING (ASSOCIATE DEGREE)	075.378-014	NURSE, GENERAL DUTY
		07.0302	PRACTICAL (VOCATIONAL) NURSING	354.878-022	NURSE, PRACTICAL
		07.0305	SURGICAL TECHNICIAN (OPERATING ROOM TECHNICIAN)	079.378-042	SURGICAL TECHNICIAN
929	LAY MIDWIVES	07.0302	PRACTICAL (VOCATIONAL) NURSING	354.878-018	BIRTH ATTENDANT

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
925	NURSING AIDES, ORDERLIES, AND ATTENDANTS	07.0303	NURSING ASSISTANCE (AIDE)	355.878-034	NURSE AIDE
		07.0302	NURSING ASSISTANCE (AIDE)	355.878-038	ORDERLY
		07.0304	PSYCHIATRIC AIDE	355.878-042	PSYCHIATRIC AIDE
926	PRACTICAL NURSES	07.0302	PRACTICAL (VOCATIONAL) NURSING	079.378-026	NURSE, LICENSED PRACTICAL
				354.878-022	NURSE, PRACTICAL
		07.0303	NURSING ASSISTANCE (AIDE)	355.878-034	NURSE AIDE
931	FLIGHT ATTENDANTS	04.19	TRANSPORTATION	352.878-010	AIRPLANE FLIGHT ATTENDANT
932	ATTENDANTS, RECREATION AND AMUSEMENT	(1)	(1)	341.878-010	CADDIE
		(1)	(1)	379.868-014	SHERIFF, DEPUTY
933	ATTENDANTS, PERSONAL SERVICE N.E.C.	04.11	HOTEL AND LODGING	358.878-014	CHECKROOM ATTENDANT
		17.11	CUSTODIAL SERVICES	381.887-014	CHARWORKER
		09.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	323.887-014	MAID II
		(1)	(1)	359.878-018	FUNERAL ATTENDANT
		(1)	(1)	297.868-010	MODEL
		(1)	(1)	353.368-018	GUIDE, ESTABLISHMENT
934	BAGGAGE PORTERS AND BELLHOPS	04.11	HOTEL AND LODGING	324.878-014	BELLHOP
				324.138-014	BELL CAPTAIN
				357.878-014	PORTER
935	BARBERS	17.2601	BARBERING	330.371-010	BARBER
		04.15	PERSONAL SERVICES	187.168-058	MANAGER, BARBER SHOP
940	BOARDING AND LODGING HOUSEKEEPERS	04.11	HOTEL AND LODGING	320.138-010	MANAGER, BOARDING HOUSE
941	BOOTBLACKS	(1)	(1)	366.878-010	BOOTBLACK
942	CHILD CARE WORKERS, EXCEPT PRIVATE HOUSEHOLD	09.0201	CARE AND GUIDANCE OF CHILDREN	307.878-010	CHILD MONITOR
				359.878-026	CHILD CARE ASSISTANT
943	ELEVATOR OPERATORS	(1)	(1)	388.868-010	ELEVATOR OPERATOR
		(1)	(1)	388.138-010	ELEVATOR STARTER
944	HAIRDRESSERS AND COSMETOLOGISTS	17.2602	COSMETOLOGY	332.271-010	COSMETOLOGIST
		04.15	PERSONAL SERVICES	187.168-062	MANAGER, BEAUTY SHOP
		(1)	(1)	332.271-018	HAIR STYLIST
945	PERSONAL SERVICE APPRENTICES	17.2602	COSMETOLOGY	332.271-014	COSMETOLOGIST APPRENTICE
950	HOUSEKEEPERS, EXCEPT PRIVATE HOUSEHOLD	09.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	321.138-010	HOUSEKEEPER

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
950	-CONTINUED	09.0205	-CONTINUED	306.878-010	HOMEMAKER
				187.168-050	EXECUTIVE HOUSEKEEPER
		17.11	CUSTODIAL SERVICES	381.887-014	CHARWORKER
		04.07	FOOD SERVICES	310.138-014	STEWARD/STEWARDESS
952	SCHOOL MONITORS	09.0201	CARE AND GUIDANCE OF CHILDREN	307.878-010	CHILD MONITOR
		(1)	(1)	195.228-014	RECREATION LEADER
		(1)	(1)	381.887-034	PORTER
953	USHERS, RECREATION AND AMUSEMENT	(1)	(1)	344.878-022	USHER
954	WELFARE SERVICE AIDES	(1)	(1)	195.168-014	COMMUNITY ORGANIZATION WORKER
		(1)	(1)	195.108-010	CASEWORKER
		(1)	(1)	195.208-010	CASE AID
960	CROSSING GUARDS AND BRIDGE TENDERS	17.2802	LAW ENFORCEMENT TRAINING	375.268-030	POLICE OFFICER
		(1)	(1)	371.868-010	SCHOOL-CROSSING GUARD
961	FIRE FIGHTERS	17.2801	FIREMAN TRAINING	373.884-014	FIRE FIGHTER
				373.168-018	FIRE CAPTAIN
				373.118-010	FIRE CHIEF
962	GUARDS	(1)	(1)	372.868-030	GUARD
		(1)	(1)	372.868-054	CAMP GUARD
		(1)	(1)	372.868-018	CORRECTION OFFICER
963	MARSHALS AND CONSTABLES	17.2802	LAW ENFORCEMENT TRAINING	377.868-014	SHERIFF, DEPUTY
964	POLICE AND DETECTIVES	17.2802	LAW ENFORCEMENT TRAINING	375.268-030	POLICE OFFICER
				375.268-014	DETECTIVE
				375.268-046	STATE HIGHWAY PATROL OFFICER
		(1)	(1)	375.168-054	POLICE SERGEANT, PRECINCT
965	SHERIFFS AND BAILIFFS	17.2802	LAW ENFORCEMENT TRAINING	377.868-014	SHERIFF, DEPUTY
980	CHILD CARE WORKERS, PRIVATE HOUSEHOLD	09.0201	CARE AND GUIDANCE OF CHILDREN	307.878-010	CHILD MONITOR
981	COOKS, PRIVATE HOUSEHOLD	09.0203	FOOD MANAGEMENT, PRODUCTION, AND SERVICES	305.281-010	COOK
		09.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	306.878-010	HOMEMAKER
				303.138-010	HOUSEKEEPER, HOME
982	HOUSEKEEPERS, PRIVATE HOUSEHOLD	09.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	303.138-010	HOUSEKEEPER, HOME
		(1)	(1)	301.887-010	DAY WORKER

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
983	LAUNDERERS, PRIVATE HOUSEHOLD	09.0202	CLOTHING MANAGEMENT, PRODUCTION, AND SERVICES	302.887-014	LAUNDRESS
		(1)	(1)	302.887-010	IRONER
		(1)	(1)	301.887-010	DAY WORKER
984 (2)	CLEANERS AND SERVANTS, PRIVATE HOUSEHOLD	09.0201	CARE AND GUIDANCE OF CHILDREN	306.878-010	CHILD MONITOR
		(1)	(1)	301.887-010	DAY WORKER
	LABORERS, EXCEPT FARM				
740	ANIMAL CARETAKERS, EXCEPT FARM	01.99	AGRICULTURE, OTHER	365.874-014	ANIMAL KEEPER
				365.874-038	KENNEL ATTENDANT
		01.0299	AGRICULTURAL SUPPLIES/SERVICES OTHER	365.874-046	VETERINARY-HOSPITAL ATTENDANT
				413.884-018	FARM HAND, LIVESTOCK
				413.884-030	RANCH HAND
		(1)	(1)	356.874-022	DOG GROOMER
		(1)	(1)	356.874-042	STABLE ATTENDANT
750	CARPENTER'S HELPERS	17.1001	CARPENTRY	860.887-018	LABORER, CARPENTRY
				860.887-010	CARPENTER HELPER, MAINTENANCE
751 (3)	CONSTRUCTION LABORERS, EXCEPT CARPENTER'S HELPERS	17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	869.887-030	FENCE ERECTOR
		(1)	(1)	869.884-026	CONSTRUCTION WORKER
752	FISHERS, HUNTERS, AND TRAPPERS	17.08	COMMERICAL FISHERY OCCUPATIONS	432.884-010	FISHER, LINE
				431.884-026	FISHER, NET
				439.687-010	CLAM DREDGER
				439.884-014	NET WORKER
		(1)	(1)	436.884-026	SHELLFISH-BED WORKER
753	FREIGHT AND MATERIAL HANDLERS	04.19	TRANSPORTATION	929.887-050	MATERIAL HANDLER
		04.20	RETAIL TRADE, OTHER	922.887-070	LABORER, STORES
		(1)	(1)	905.887-010	TRUCK DRIVER HELPER
754	GARBAGE COLLECTORS	(1)	(1)	909.887-014	GARBAGE COLLECTOR
		(1)	(1)	909.883-010	GARBAGE COLLECTOR
755	GARDENERS AND GROUNDSKEEPERS, EXCEPT FARM	01.0504	LANDSCAPING	407.884-010	GROUNDS KEEPER
				407.181-010	LANDSCAPE GARDENER
		(1)	(1)	304.887-014	YARD WORKER
		(1)	(1)	407.887-018	LABORER, LANDSCAPE
760	LONGSHORE WORKERS AND STEVEDORES	(1)	(1)	922.887-090	STEVEDORE I

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
760	-CONTINUED	(1)	(1)	911.883-022	STEVEDORE I
761	TIMBERCUTTING AND LOGGING WORKERS	(1)	(1)	940.884-026	LOGGER, ALL-ROUND
		(1)	(1)	940.884-018	FALLER
		(1)	(1)	940.884-010	BUCKER
		(1)	(1)	940.884-014	CORDWOOD CUTTER
		(1)	(1)	942.887-018	CHOKE SETTER
762	STOCK HANDLERS	04.20	RETAIL TRADE, OTHER	922.887-070	LABORER, STORES
		04.06	FOOD DISTRIBUTION	920.887-022	BAGGER
				290.887-010	SALESPERSON, FOOD
				299.468-010	CASHIER-CHECKER
		(1)	(1)	223.387-094	STOCK CLERK
763	TEAMSTERS	(1)	(1)	904.883-010	LOG-TRUCK DRIVER
		(1)	(1)	940.884-026	LOGGER, ALL-ROUND
764	VEHICLE WASHERS AND EQUIPMENT CLEANERS	17.11	CUSTODIAL SERVICES	381.887-030	PORTER II
		(1)	(1)	919.887-010	CLEANER
		(1)	(1)	915.887-018	PORTER, USED-CAR LOT
770	WAREHOUSE LABORERS, N.E.C.	04.20	RETAIL TRADE, OTHER	922.887-070	LABORER, STORES
780	OTHER LABORERS	01.0505	NURSERY OPERATION AND MANAGEMENT	406.887-030	NURSERY WORKER
		(1)	(1)	910.782-018	TRACK REPAIRER
		(1)	(1)	869.887-098	TRACK LAYER
		(1)	(1)	892.883-014	LABORER, HOISTING
785	NOT SPECIFIED LABORERS	04.19	TRANSPORTATION	929.887-050	MATERIAL HANDLER
		04.20	RETAIL TRADE, OTHER	922.887-070	LABORER, STORE
		(1)	(1)	509.886-010	LABORER, GENERAL
	FARMERS AND FARM WORKERS				
801 (M)	FARMERS (OWNERS AND TENANTS)	01.01	AGRICULTURAL PRODUCTION	421.181-010	FARMER, GENERAL
802	FARM MANAGERS	01.0104	FARM BUSINESS MANAGEMENT	409.168-010	MANAGER, FARM
		01.01	AGRICULTURAL PRODUCTION	421.181-010	FARMER, GENERAL
		01.0101	ANIMAL SCIENCE	411.181-010	FARMER, DAIRY
				411.884-010	FARM HAND, DAIRY I
				419.181-010	ANIMAL BREEDER
		01.0505	NURSERY OPERATION AND MANAGEMENT	406.168-010	MANAGER, NURSERY
		01.0401	FOOD PRODUCTS	412.168-010	MANAGER, HATCHERY

SEE FOOTNOTES AT END OF TABLE.

Table 1. Conversion of National/State Matrix titles to vocational education classification system—Continued

1970 CENSUS CODE	NATIONAL/STATE MATRIX TITLE	VOCATIONAL EDUCATION SYSTEM		DICTIONARY OF OCCUPATIONAL TITLES	
		CODE	PROGRAM TITLE	CODE	TITLE
802	-CONTINUED	(1)	(1)	419.181-034	GAME FARMER
821	FARM LABOR SUPERVISORS	01.01	AGRICULTURAL PRODUCTION	429.131-010	FARM SUPERVISOR
		01.0101	ANIMAL SCIENCE	413.131-010	SUPERVISOR, STOCK RANCH
		01.0502	FLORICULTURE	406.181-010	FLOWER GROWER
822	FARM LABORERS, WAGE WORKERS	01.01	AGRICULTURAL PRODUCTION	421.883-010	FARM HAND, GENERAL
		01.0101	ANIMAL SCIENCE	413.884-030	RANCH HAND
				411.884-010	FARM HAND, DAIRY
823	FARM LABORERS, UNPAID FAMILY WORKERS	01.01	AGRICULTURAL PRODUCTION	421.883-010	FARM HAND, GENERAL
		(1)	(1)	421.887-010	FARM HAND, GENERAL
824	FARM SERVICE LABORERS, SELF-EMPLOYED	01.0299	AGRICULTURAL SUPPLIES/SERVICES, OTHER	412.687-014	CHICKEN SEXER
		01.0301	AGRICULTURAL POWER AND MACHINERY	424.883-010	HEAVY EQUIPMENT OPERATOR

(1) The DOT code has more than 5 percent of the total estimated employment in the BLS National/State Matrix occupational title but there is no corresponding specifically detailed vocational education instructional program code.

(2) No DOT codes have more than 5 percent of the total estimated employment in the BLS National/State Matrix occupational title.

(3) Although a separate category is shown in the 1970 Census for Former Members of the Armed Forces, data for this occupational category are not shown separately in the BLS National/State Matrix System.

Table 2. Vocational education instructional programs and related National/State Matrix titles

INSTRUCTIONAL PROGRAM		NATIONAL/STATE MATRIX TITLE
CODE	TITLE	
01.	**AGRICULTURE**	
01.01	AGRICULTURAL PRODUCTION	BUYERS AND SHIPPERS, FARM PRODUCTS FARMERS (OWNERS AND TENANTS) FARM MANAGERS FARM LABOR SUPERVISORS FARM LABORERS, WAGE WORKERS FARM LABORERS, UNPAID FAMILY WORKERS
01.0101	ANIMAL SCIENCE	ATHLETES AND KINDRED WORKERS WRITERS, ARTISTS, AND ENTERTAINERS, N.E.C. ANIMAL CARETAKERS, EXCEPT FARM FARM LABOR SUPERVISORS FARM LABORERS, WAGE WORKERS
01.0104	FARM BUSINESS MANAGEMENT	FARM MANAGERS
01.02	AGRICULTURAL SUPPLIES/SERVICES	FARM MANAGEMENT ADVISORS
01.0202	FEEDS	MIXING OPERATIVES
01.0299	AGRICULTURAL SUPPLIES/SERVICES, OTHER	AGRICULTURAL AND BIOLOGICAL TECHNICIANS, EXCEPT HEALTH BLACKSMITHS ANIMAL CARETAKERS, EXCEPT FARM FARM SERVICE LABORERS, SELF-EMPLOYED
01.0301	AGRICULTURAL POWER AND MACHINERY	FARM IMPLEMENT MECHANICS AND REPAIRERS FARM SERVICE LABORERS, SELF-EMPLOYED
01.0401	FOOD PRODUCTS	BUYERS AND SHIPPERS, FARM PRODUCTS MEAT CUTTERS AND BUTCHERS, MANUFACTURING FARM MANAGERS
01.0502	FLORICULTURE	FARM LABOR SUPERVISORS
01.0504	LANDSCAPING	GARDENERS AND GROUNDSKEEPERS, EXCEPT FARM
01.0505	NURSERY OPERATION AND MANAGEMENT	OTHER LABORERS FARM MANAGERS
01.0601	FORESTS	FORESTERS AND CONSERVATIONISTS
01.0603	SOIL	FORESTERS AND CONSERVATIONISTS
01.99	AGRICULTURE, OTHER	ANIMAL CARETAKERS, EXCEPT FARM
04.	**DISTRIBUTIVE EDUCATION**	
04.01	ADVERTISING SERVICES	ECONOMISTS EDITORS AND REPORTERS PUBLIC RELATIONS SPECIALISTS AND PUBLICITY WRITERS ADVERTISING AGENTS AND SALES WORKERS DECORATORS AND WINDOW DRESSERS
04.02	APPAREL AND ACCESSORIES	DEMONSTRATORS SALES CLERKS, RETAIL TRADE
04.03	AUTOMOTIVE	SALES REPRESENTATIVES, WHOLESALE TRADE SALES WORKERS, RETAIL TRADE PARKING ATTENDANTS
04.04	FINANCE AND CREDIT	BANK OFFICERS AND FINANCIAL MANAGERS STOCK AND BOND SALES AGENTS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

INSTRUCTIONAL PROGRAM		NATIONAL/STATE MATRIX TITLE
CODE	TITLE	
04.05	FLORISTRY	DECORATORS AND WINDOW DRESSERS
04.06	FOOD DISTRIBUTION	BUYERS AND SHIPPERS, FARM PRODUCTS SALES MANAGERS AND DEPARTMENT HEADS, RETAIL TRADE SALES REPRESENTATIVES, WHOLESALE TRADE SALES REPRESENTATIVES, MANUFACTURING INDUSTRIES CASHIERS MILLERS; GRAIN, FLOUR, SEED DELIVERY AND ROUTE WORKERS STOCK HANDLERS
04.07	FOOD SERVICES	RESTAURANT, CAFETERIA, AND BAR MANAGERS HOUSEKEEPERS, EXCEPT PRIVATE HOUSEHOLD
04.08	GENERAL MERCHANDISE	PHARMACISTS BUYERS, WHOLESALE AND RETAIL TRADE RESTAURANT, CAFETERIA, AND BAR MANAGERS SALES MANAGERS AND DEPARTMENT HEADS, RETAIL TRADE MANAGERS AND ADMINISTRATORS, N.E.C. DEMONSTRATORS HUCKSTERS AND PEDDLERS SALES CLERKS, RETAIL TRADE SALES WORKERS, RETAIL TRADE, EXCEPT CLERKS SALES PEOPLE OF SERVICES AND CONSTRUCTION CASHIERS COLLECTORS, BILL AND ACCOUNT
04.09	HARDWARE, BUILDING MATERIALS, FARM AND GARDEN SUPPLIES AND EQUIPMENT	SALES REPRESENTATIVES, MANUFACTURING INDUSTRIES SALES REPRESENTATIVES, WHOLESALE TRADE SALES WORKERS, RETAIL TRADE, EXCEPT CLERKS
04.10	HOME FURNISHINGS	SALES WORKERS, RETAIL TRADE, EXCEPT CLERKS
04.11	HOTEL AND LODGING	MANAGERS AND SUPERINTENDENTS, BUILDING COUNTER CLERKS, EXCEPT FOOD ATTENDANTS, RECREATION AND AMUSEMENT BAGGAGE PORTERS AND BELLHOPS BOARDING AND LODGING HOUSE-KEEPERS
04.12	INDUSTRIAL MARKETING	SALES MANAGERS, EXCEPT RETAIL TRADE SALES MANAGERS AND DEPARTMENT HEADS, RETAIL TRADE SALES REPRESENTATIVES, MANUFACTURING INDUSTRIES SALES REPRESENTATIVES, WHOLESALE TRADE OFFICE MACHINE REPAIRERS ENGINEERS, SALES
04.13	INSURANCE	INSURANCE AGENTS, BROKERS, AND UNDERWRITERS INSURANCE ADJUSTORS, EXAMINERS, AND INVESTIGATORS
04.15	PERSONAL SERVICES	EMBALMERS PHOTOGRAPHERS FUNERAL DIRECTORS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

INSTRUCTIONAL PROGRAM		NATIONAL/STATE MATRIX TITLE
CODE	TITLE	
04.15	-CONTINUED	BARBERS HAIRDRESSERS AND COSMETOLOGISTS
04.16	PETROLEUM	SALES MANAGERS AND DEPARTMENT HEADS, RETAIL TRADE GARAGE WORKERS AND GAS STATION ATTENDANTS
04.17	REAL ESTATE	MANAGERS AND SUPERINTENDENTS, BUILDING PURCHASING AGENTS AND BUYERS, N.E.C. REAL ESTATE AGENTS AND BROKERS REAL ESTATE APPRAISERS
04.18	RECREATION AND TOURISM	RECREATION WORKERS
04.19	TRANSPORTATION	BUS DRIVERS TAXICAB DRIVERS AND CHAUFFEURS FREIGHT AND MATERIAL HANDLERS NOT SPECIFIED LABORERS FLIGHT ATTENDANTS TICKET STATION AND EXPRESS AGENTS
04.20	RETAIL TRADE, OTHER	HUCKSTERS AND PEDDLERS DEMONSTRATORS STOCK CLERKS OR STOREKEEPERS FREIGHT AND MATERIAL HANDLERS STOCK HANDLERS WAREHOUSE LABORERS, N.E.C. NOT SPECIFIED LABORERS
04.99	DISTRIBUTIVE EDUCATION, OTHER	BUYERS, WHOLESALE AND RETAIL TRADE PURCHASING AGENTS AND BUYERS, N.E.C. SALES PEOPLE OF SERVICES AND CONSTRUCTION
07.	**HEALTH OCCUPATIONS EDUCATION**	
07.0101	DENTAL ASSISTING	DENTAL LABORATORY TECHNICIANS DENTAL ASSISTANTS HEALTH AIDES, EXCEPT NURSING
07.0102	DENTAL HYGIENE (ASSOCIATE DEGREE)	DENTAL HYGIENISTS
07.0103	DENTAL LABORATORY TECHNICIAN	DENTAL LABORATORY TECHNICIAN
07.0201	CYTOLOGY (CYTOTECHNOLOGY)	BIOLOGICAL SCIENTISTS
07.0202	HISTOLOGY	CLINICAL LABORATORY TECHNOLOGISTS AND TECHNICIANS
07.0203	MEDICAL LABORATORY ASSISTING	CLINICAL LABORATORY TECHNOLOGISTS AND TECHNICIANS
07.0301	NURSING (ASSOCIATE DEGREE)	REGISTERED NURSES HEALTH TRAINEES
07.0302	PRACTICAL (VOCATIONAL) NURSING	HEALTH TRAINEES LAY MIDWIVES PRACTICAL NURSES
07.0303	NURSING ASSISTANCE (AIDE)	NURSING AIDES, ORDERLIES, AND ATTENDANTS PRACTICAL NURSES
07.0304	PSYCHIATRIC AIDE	THERAPISTS OTHER HEALTH TECHNOLOGISTS AND TECHNICIANS ORDERLIES AND ATTENDANTS
07.0305	SURGICAL TECHNICIAN (OPERATING ROOM TECHNICIANS)	OTHER HEALTH TECHNOLOGISTS AND TECHNICIANS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

INSTRUCTIONAL PROGRAM		NATIONAL/STATE MATRIX TITLE
CODE	TITLE	
07.0305	-CONTINUED	HEALTH TRAINEES
07.0402	PHYSICAL THERAPY	THERAPISTS THERAPY ASSISTANTS HEALTH AIDES, EXCEPT NURSING
07.0601	OPHTHALMIC DISPENSING	OPTICIANS, AND LENS GRINDERS AND POLISHERS
07.0902	ELECTROCARDIOGRAPH TECHNICIAN	OTHER HEALTH TECHNOLOGISTS AND TECHNICIANS
07.0903	INHALATION THERAPY	THERAPISTS
07.0904	MEDICAL ASSISTANT (PHYSICIAN'S OFFICE)	HEALTH AIDES, EXCEPT NURSING
07.0909	MORTUARY SCIENCE	EMBALMERS
09.	**HOME ECONOMICS**	
09.0201	CARE AND GUIDANCE OF CHILDREN	CHILD CARE WORKERS, EXCEPT PRIVATE HOUSEHOLD SCHOOL MONITORS CHILD CARE WORKERS, PRIVATE HOUSEHOLD CLEANERS AND SERVANTS, PRIVATE HOUSEHOLD
09.0202	CLOTHING MANAGEMENT, PRODUCTION, AND SERVICES	CHECKERS, EXAMINERS, AND INSPECTORS, MANUFACTURING DRESSMAKERS LAUNDERERS, PRIVATE HOUSEHOLD
09.0203	FOOD MANAGEMENT, PRODUCTION, AND SERVICES	RESTAURANT, CAFETERIA, AND BAR MANAGERS COOKS, PRIVATE HOUSEHOLD
09.0205	INSTITUTIONAL AND HOME MANAGEMENT AND SUPPORTING SERVICES	LODGING QUARTERS CLEANERS, EXCEPT PRIVATE HOUSEHOLD BUILDING INTERIOR CLEANERS, N.E.C. HOUSEKEEPERS, EXCEPT PRIVATE HOUSEHOLD COOKS, PRIVATE HOUSEHOLD HOUSEKEEPERS, PRIVATE HOUSEHOLD ATTENDANTS, PERSONAL SERVICE, N.E.C.
14.	**OFFICE OCCUPATIONS**	
14.0101	ACCOUNTANTS	ESTIMATORS AND INVESTIGATORS, N.E.C.
14.0102	BOOKKEEPERS	BOOKKEEPERS PROOFREADERS
14.0103	CASHIERS	CASHIERS
14.0104	MACHINE OPERATORS (BILLING, BOOKKEEPING, AND COMPUTING)	BOOKKEEPING AND BILLING MACHINE OPERATORS CALCULATING MACHINE OPERATORS TABULATING MACHINE OPERATORS PAYROLL AND TIMEKEEPING CLERKS
14.0105	TELLERS	BANK TELLERS
14.0201	COMPUTER AND CONSOLE OPERATORS	CLERICAL SUPERVISORS, N.E.C. COMPUTER AND PERIPHERAL EQUIPMENT OPERATORS KEY PUNCH OPERATORS
14.020201	KEY PUNCH AND CODING EQUIPMENT OPERATORS	KEY PUNCH OPERATORS TABULATING MACHINE OPERATORS
14.0203	PROGRAMMERS	COMPUTER PROGRAMMERS COMPUTER SYSTEMS ANALYSTS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

INSTRUCTIONAL PROGRAM		NATIONAL/STATE MATRIX TITLE
CODE	TITLE	
14.0203	-CONTINUED	COMPUTER AND PERIPHERAL EQUIPMENT OPERATORS
14.0204	SYSTEMS ANALYSTS	COMPUTER SYSTEMS ANALYSTS COMPUTER SPECIALISTS, N.E.C.
14.0301	DUPLICATING MACHINE OPERATORS	DUPLICATING MACHINE OPERATORS
14.0302	FILE CLERKS	ENUMERATORS AND INTERVIEWERS FILE CLERKS
14.0303	GENERAL OFFICE CLERKS	ACCOUNTANTS BILLING CLERKS BOOKKEEPERS CLERICAL SUPERVISORS, N.E.C. OFFICE MACHINE OPERATORS, N.E.C. PAYROLL AND TIMEKEEPING CLERKS STATISTICAL CLERKS MISCELLANEOUS CLERICAL WORKERS NOT SPECIFIED CLERICAL WORKERS BOOKKEEPING AND BILLING MACHINE OPERATORS
14.0399	FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL OCCUPATIONS, OTHER	BILLING CLERKS CLERICAL ASSISTANTS, SOCIAL WELFARE TABULATING MACHINE OPERATORS OFFICE MACHINE OPERATORS, N.E.C. PROOFREADERS MISCELLANEOUS CLERICAL WORKERS NOT SPECIFIED CLERICAL WORKERS
14.0401	COMMUNICATIONS SYSTEMS CLERKS AND OPERATORS	TELEGRAPH OPERATORS TELEPHONE OPERATORS NOT SPECIFIED APPRENTICES
14.0403	MAIL AND POSTAL CLERKS	POSTMASTERS AND MAIL SUPERINTENDENTS MAIL CARRIERS, POST OFFICE MAIL HANDLERS, EXCEPT POST OFFICE POSTAL CLERKS
14.0404	MAIL PREPARING AND MAIL HANDLING MACHINE OPERATORS	OFFICE MACHINE OPERATORS, N.E.C.
14.0405	MESSENGERS AND OFFICE BOYS AND GIRLS	MESSENGERS AND OFFICE HELPERS TELEGRAPH MESSENGERS
14.0406	RECEPTIONISTS AND INFORMATION CLERKS	RECEPTIONISTS
14.0499	INFORMATION COMMUNICATION OCCUPATIONS, OTHER	LIBRARIANS ENUMERATORS AND INTERVIEWERS LIBRARY ATTENDANTS AND ASSISTANTS MAIL HANDLERS, EXCEPT POST OFFICE MESSENGERS AND OFFICE HELPERS METER READERS, UTILITY MISCELLANEOUS CLERICAL WORKERS
14.0501	PLANNING AND PRODUCTION CLERKS	EXPEDITERS AND PRODUCTION CONTROLLERS
14.0502	QUALITY CONTROL CLERKS	INSURANCE ADJUSTORS, EXAMINERS AND INVESTIGATORS
14.0503	SHIPPING AND RECEIVING CLERKS	EXPEDITORS AND PRODUCTION CONTROLLERS SHIPPING AND RECEIVING CLERKS GRADERS AND SORTERS, MANUFACTURING
14.0504	STOCK AND INVENTORY CLERKS	STOCK CLERKS OR STOREKEEPERS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

INSTRUCTIONAL PROGRAM		NATIONAL/STATE MATRIX TITLE
CODE	TITLE	
14.0505	TRAFFIC, RATE, AND TRANSPORTATION CLERKS	DISPATCHERS AND STARTERS, VEHICLE
14.0602	INTERVIEWERS AND TEST TECHNICIANS	PERSONNEL AND LABOR RELATIONS WORKERS
14.0603	PERSONNEL ASSISTANTS	PERSONNEL AND LABOR RELATIONS WORKERS FILE CLERKS
14.0702	SECRETARIES	SECRETARIES, LEGAL SECRETARIES, MEDICAL SECRETARIES, N.E.C.
14.0703	STENOGRAPHERS	STENOGRAPHERS
14.0801	ADMINISTRATIVE ASSISTANTS	OFFICIALS AND ADMINISTRATORS, N.E.C.
14.0802	BUDGET MANAGEMENT ANALYSTS	ASSESSORS, CONTROLLERS, AND TREASURERS; LOCAL PUBLIC ADMINISTRATION
14.0804	DATA METHODS AND SYSTEMS PROCEDURES ANALYSTS	OPERATORS AND SYSTEMS RESEARCHERS AND ANALYSTS
14.0805	OFFICE MANAGERS AND CHIEF CLERKS	OFFICE MANAGERS, N.E.C. CLERICAL SUPERVISORS, N.E.C.
14.0899	SUPERVISORY AND ADMINISTRATIVE OCCUPATIONS, OTHER	CREDIT AND COLLECTION MANAGERS
14.0901	CLERK TYPISTS	TYPISTS
14.0902	TYPISTS	TELEGRAPH OPERATORS TYPISTS
14.99	OFFICE OCCUPATIONS, OTHER	COLLECTORS, BILL AND ACCOUNT ESTIMATORS AND INVESTIGATORS, N.E.C. STATISTICAL CLERKS
16.	**TECHNICAL EDUCATION**	
16.0105	CHEMICAL TECHNOLOGY	AGRICULTURAL AND BIOLOGICAL TECHNICIANS, EXCEPT HEALTH CHEMICAL TECHNICIANS ENGINEERING AND SCIENCE TECHNICIANS, N.E.C. OTHER TECHNICIANS, EXCEPT HEALTH
16.0107	ELECTRICAL TECHNOLOGY	ELECTRICAL AND ELECTRONIC ENGINEERING TECHNICIANS
16.0108	ELECTRONIC TECHNOLOGY	ELECTRICAL AND ELECTRONIC ENGINEERING TECHNICIANS OTHER TECHNICIANS, EXCEPT HEALTH DATA PROCESSING MACHINE REPAIRERS RADIO AND TELEVISION REPAIRERS
16.0111	INDUSTRIAL TECHNOLOGY	INDUSTRIAL ENGINEERING TECHNICIANS
16.0113	MECHANICAL TECHNOLOGY	ENGINEERS, OTHER MECHANICAL ENGINEERING TECHNICIANS ENGINEERING AND SCIENCE TECHNICIANS, N.E.C. TOOL PROGRAMMERS, NUMERICAL CONTROL
16.011303	PRODUCTION	INDUSTRIAL ENGINEERING TECHNICIANS
16.0114	METALLURGICAL TECHNOLOGY	HEAT TREATERS, ANNEALERS, AND TEMPERERS

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Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

INSTRUCTIONAL PROGRAM		NATIONAL/STATE MATRIX TITLE
CODE	TITLE	
16.0117	SCIENTIFIC DATA PROCESSING	COMPUTER PROGRAMMERS
16.0203	FOOD PROCESSING TECHNOLOGY	AGRICULTURAL AND BIOLOGICAL TECHNICIANS, EXCEPT HEALTH
16.0601	COMMERCIAL PILOT TRAINING	AIRPLANE PILOTS
16.0699	MISCELLANEOUS TECHNICAL EDUCATION, OTHER	ATMOSPHERIC AND SPACE SCIENTISTS
17.	**TRADE AND INDUSTRIAL OCCUPATIONS**	
17.01	AIR CONDITIONING	AIR CONDITIONING, HEATING, AND REFRIGERATION MECHANICS AND REPAIRERS
17.0101	COOLING	AIR CONDITIONING, HEATING, AND REFRIGERATION MECHANICS AND REPAIRERS
17.0102	HEATING	AIR CONDITIONING, HEATING, AND REFRIGERATION MECHANICS AND REPAIRERS
17.02	APPLIANCE REPAIR	HOUSEHOLD APPLIANCE AND ACCESSORY INSTALLERS AND REPAIRERS
17.0201	ELECTRICAL APPLIANCES	HOUSEHOLD APPLIANCE AND ACCESSORY INSTALLERS AND REPAIRERS
17.0202	GAS APPLIANCES	HOUSEHOLD APPLIANCE AND ACCESSORY INSTALLERS AND REPAIRERS
17.03	AUTOMOBILE SERVICES	INSPECTORS, EXCEPT CONSTRUCTION, PUBLIC ADMINISTRATION
17.0301	BODY AND FENDER	AUTOMOBILE BODY REPAIRERS PAINTERS, MANUFACTURED ARTICLES
17.0302	MECHANICS	AUTOMOBILE BODY REPAIRERS AUTOMOBILE MECHANICS FARM IMPLEMENT MECHANICS AND REPAIRERS HEAVY EQUIPMENT MECHANICS, INCLUDING DIESEL
17.0303	SPECIALIZATION, OTHER	AUTOMOBILE ACCESSORY INSTALLERS
17.0401	AIRCRAFT MAINTENANCE	AIRCRAFT MECHANICS AND REPAIRERS
17.0402	AIRCRAFT OPERATIONS	FLIGHT ENGINEERS RADIO OPERATORS
17.0403	GROUND OPERATIONS	AIR TRAFFIC CONTROLLERS
17.06	BUSINESS MACHINE MAINTENANCE	DATA PROCESSING MACHINE REPAIRERS OFFICE MACHINE REPAIRERS
17.07	COMMERCIAL ART OCCUPATIONS	PAINTERS AND SCULPTORS
17.0701	INTERIOR DECORATING	DESIGNERS DECORATORS AND WINDOW DRESSERS
17.0703	PRODUCT DESIGN	PAINTERS AND SCULPTORS
17.08	COMMERCIAL FISHING OCCUPATIONS	OFFICERS, PILOTS, AND PURSERS; SHIP GRADERS AND SORTERS, MANUFACTURING MEAT CUTTERS AND BUTCHERS, MANUFACTURING

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

INSTRUCTIONAL PROGRAM		NATIONAL/STATE MATRIX TITLE
CODE	TITLE	
17.08 17.0801	—CONTINUED SEAMANSHIP	FISHERS, HUNTERS, AND TRAPPERS SAILORS AND DECKHANDS
17.0802	SHIP AND BOAT OPERATION AND MAINTENANCE	BOAT OPERATORS
17.0901	PHOTOGRAPHIC LABURATORY AND DARKROOM OCCUPATIONS	OFFICE MACHINE OPERATORS, N.E.C. PHOTOGRAPHIC PROCESS WORKERS
17.10	CONSTRUCTION AND MAINTENANCE TRADES	JANITORS AND SEXTONS
17.1001	CARPENTRY	CARPENTERS CARPENTER APPRENTICES CARPENTERS' HELPERS
17.1002	ELECTRICITY	ELECTRICIANS
17.100301	MAINTENANCE, HEAVY EQUIPMENT	HEAVY EQUIPMENT MECHANICS, INCLUDING DIESEL
17.100302	OPERATION, HEAVY EQUIPMENT	BULLDOZER OPERATORS CRANE, DERRICK, AND HOIST OPERATORS EXCAVATING, GRADING, AND ROAD MACHINE OPERATORS; EXCEPT BULLDOZER DRILLERS, EARTH
17.1004	MASONRY	BRICKMASONS AND STONEMASONS TILE SETTERS
17.1005	PAINTING AND DECORATING	PAINTERS, CONSTRUCTION AND MAINTENANCE PAINTER APPRENTICES PAPER HANGERS PAINTERS, MANUFACTURED ARTICLES
17.1006	PLASTERING	PLASTERERS DRYWALL INSTALLERS AND LATHERS
17.1007	PLUMBING AND PIPEFITTING	PLUMBERS AND PIPEFITTERS
17.1008	DRYWALL INSTALLATION	DRYWALL INSTALLERS AND LATHERS
17.1009	GLAZING	GLAZIERS
17.1010	ROOFING	ROOFERS AND SLATERS
17.1099	CONSTRUCTION AND MAINTENANCE TRADES, OTHER	BOILERMAKERS CEMENT AND CONCRETE FINISHERS FLOOR LAYERS, EXCEPT TILE SETTERS MILLWRIGHTS STRUCTURAL METAL CRAFT WORKERS TILE SETTERS ASBESTOS AND INSULATION WORKERS BLASTERS CONSTRUCTION LABORERS, EXCEPT CARPENTERS' HELPERS
17.11	CUSTODIAL SERVICES	VEHICLE WASHERS AND EQUIPMENT CLEANERS NOT SPECIFIED LABORERS LODGING QUARTERS CLEANERS, EXCEPT PRIVATE HOUSEHOLD BUILDING INTERIOR CLEANERS, N.E.C. JANITORS AND SEXTONS ATTENDANTS, PERSONAL SERVICE, N.E.C. HOUSEKEEPERS, EXCEPT PRIVATE HOUSEHOLD
17.12	DIESEL MECHANIC	RAILROAD AND CAR SHOP REPAIRERS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

INSTRUCTIONAL PROGRAM		NATIONAL/STATE MATRIX TITLE
CODE	TITLE	
17.13	DRAFTING	DRAFTERS
17.14	ELECTRICAL OCCUPATIONS	ELECTRICIANS
17.1401	INDUSTRIAL ELECTRICIAN	TELEPHONE LINE INSTALLERS AND REPAIRERS
17.1402	LINEMAN	ELECTRIC POWER LINE AND CABLE INSTALLERS AND REPAIRERS TELEPHONE LINE INSTALLERS AND REPAIRERS
17.1403	MOTOR REPAIRMEN	WINDING OPERATIVES
17.1501	COMMUNICATIONS	TELEPHONE INSTALLERS AND REPAIRERS
17.1503	RADIO/TELEVISION	RADIO AND TELEVISION REPAIRERS
17.16	FABRIC MAINTENANCE SERVICES	TAILORS CLOTHING IRONERS AND PRESSERS LAUNDRY AND DRY CLEANING OPERATIVES, N.E.C. DYERS COUNTER CLERKS, EXCEPT FOOD
17.1601	DRY CLEANING	LAUNDRY AND DRY CLEANING OPERATIVES, N.E.C.
17.1602	LAUNDERING	CLOTHING IRONERS AND PRESSERS LAUNDRY AND DRY CLEANING OPERATIVES, N.E.C.
17.1901	COMPOSITION, MAKEUP, AND TYPESETTING	COMPOSITORS AND TYPESETTERS PRINTING TRADES APPRENTICES, EXCEPT PRINTING PRESS ELECTROTYPERS AND STEREOTYPERS
17.1902	PRINTING PRESS OCCUPATIONS	PRINTING TRADES APPRENTICES, EXCEPT PRINTING PRESS PRINTING PRESS OPERATORS PRINTING PRESS APPRENTICES
17.1903	LITHOGRAPHY, PHOTOGRAPHY, AND PLATE-MAKING	PHOTOENGRAVERS AND LITHOGRAPHERS
17.1904	PHOTOENGRAVING	PHOTOENGRAVERS AND LITHOGRAPHERS
17.2002	RADIOGRAPHER	RADIOLOGIC TECHNOLOGISTS AND TECHNICIANS
17.2101	INSTRUMENTS (OTHER THAN WATCHES AND CLOCKS)	MISCELLANEOUS MECHANICS AND REPAIRERS OPTICIANS, AND LENS GRINDERS AND POLISHERS
17.2102	WATCHMAKING AND REPAIR	JEWELERS AND WATCHMAKERS
17.22	MARITIME OCCUPATIONS	MECHANICS, EXCEPT AUTO REPAIRERS
17.2301	FOUNDRY	MOLDERS, METAL MOLDER APPRENTICES FURNACE TENDERS, SMELTERERS, AND POURERS, METAL
17.2302	MACHINE SHOP	JOB AND DIE SETTERS, METAL MACHINISTS MACHINIST APPRENTICES PATTERN AND MODEL MAKERS, EXCEPT PAPER OTHER PRECISION MACHINE OPERATIVES
17.2303	MACHINE TOOL OPERATION	CUTTING OPERATIVES, N.E.C. DRILL PRESS OPERATORS GRINDING MACHINE OPERATIVES

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

INSTRUCTIONAL PROGRAM		NATIONAL/STATE MATRIX TITLE
CODE	TITLE	
17.2303	—CONTINUED	LATHE AND MILLING MACHINE OPERATIVES OTHER PRECISION MACHINE OPERATIVES PUNCH AND STAMPING PRESS OPERATIVES SAWYERS
17.2304	METAL TRADES, COMBINED	JOB AND DIE SETTERS, METAL STRUCTURAL METAL CRAFT WORKERS PUNCH AND STAMPING PRESS OPERATIVES
17.2305	SHEET METAL	SHEET METAL WORKERS AND TINSMITHS SHEET METAL APPRENTICES
17.230602	ELECTRIC WELDING	WELDERS AND FLAME CUTTERS
17.230603	COMBINATION WELDING	WELDERS AND FLAME CUTTERS
17.230604	BRAZING AND SOLDERING	SOLDERERS
17.2307	TOOL AND DIE MAKING	TOOL AND DIE MAKERS TOOL AND DIE MAKER APPRENTICES
17.2399	METALWORKING, OTHER	BLACKSMITHS ENGRAVERS, EXCEPT PHOTO-ENGRAVERS FORGE AND HAMMER OPERATORS PHOTOENGRAVERS AND LITHOGRAPHERS ROLLERS AND FINISHERS, METAL FILERS, POLISHERS, SANDERS, AND BUFFERS METAL PLATERS GRINDING MACHINE OPERATIVES
17.24	METALLURGY	HEAT TREATERS, ANNEALERS, AND TEMPERERS INSPECTORS, N.E.C.
17.2601	BARBERING	BARBERS
17.2602	COSMETOLOGY	HAIRDRESSERS AND COSMETOLOGISTS PERSONAL SERVICE APPRENTICES
17.2801	FIREMAN TRAINING	FIRE FIGHTERS
17.2802	LAW ENFORCEMENT TRAINING	CROSSING GUARDS AND BRIDGE TENDERS MARSHALS AND CONSTABLES POLICE AND DETECTIVES SHERIFFS AND BAILIFFS
17.2899	PUBLIC SERVICE OCCUPATIONS, OTHER	CONSTRUCTION INSPECTORS, PUBLIC ADMINISTRATION
17.2901	BAKER	BAKERS
17.2902	COOK/CHEF	COOKS, EXCEPT PRIVATE HOUSEHOLD FOOD SERVICE WORKERS, N.E.C., EXCEPT PRIVATE HOUSEHOLD
17.2903	MEAT CUTTER	MEAT CUTTERS AND BUTCHERS, EXCEPT MANUFACTURING MEAT CUTTERS AND BUTCHERS, MANUFACTURING
17.2904	WAITER/WAITRESS	WAITERS' ASSISTANTS FOOD COUNTER AND FOUNTAIN WORKERS WAITERS
17.31	SMALL ENGINE REPAIR, INTERNAL COMBUSTION	MISCELLANEOUS MECHANICS AND REPAIRERS

Table 2. Vocational education instructional programs and related National/State Matrix titles—Continued

INSTRUCTIONAL PROGRAM		NATIONAL/STATE MATRIX TITLE
CODE	TITLE	
17.32	STATIONARY ENERGY SOURCES OCCUPATIONS	POWER STATION OPERATORS STATIONARY ENGINEERS FURNACE TENDERS AND STOKERS, EXCEPT METAL
17.3202	PUMPING PLANTS	RAIL VEHICLE OPERATORS, N.E.C.
17.3301	DRESSMAKING	DRESSMAKERS
17.3302	TAILORING	TAILORS DRESSMAKERS
17.3399	TEXTILE PRODUCTION AND FABRICATION, OTHER	LOOM FIXERS TAILORS CRAFT AND KINDRED WORKERS, N.E.C. CUTTING OPERATIVES, N.E.C. DYERS MILLINERS SEWERS AND STITCHERS CARDING, LAPPING, AND COMBING OPERATIVES KNITTERS, LOOPERS, AND TOPPERS SPINNERS, TWISTERS, AND WINDERS WEAVERS NOT SPECIFIED OPERATIVES
17.34	LEATHERWORKING	UPHOLSTERERS
17.3401	SHOE MANUFACTURING	SHOE REPAIRERS SHOEMAKING MACHINE OPERATIVES
17.3402	SHOE REPAIR	SHOE REPAIRERS
17.35	UPHOLSTERING	AUTOMOBILE ACCESSORY INSTALLERS UPHOLSTERERS
17.3601	MILLWORK AND CABINETMAKING	CABINETMAKERS SPECIFIED CRAFT APPRENTICES, N.E.C. SAWYERS
17.3699	WOODWORKING, OTHER	SAWYERS

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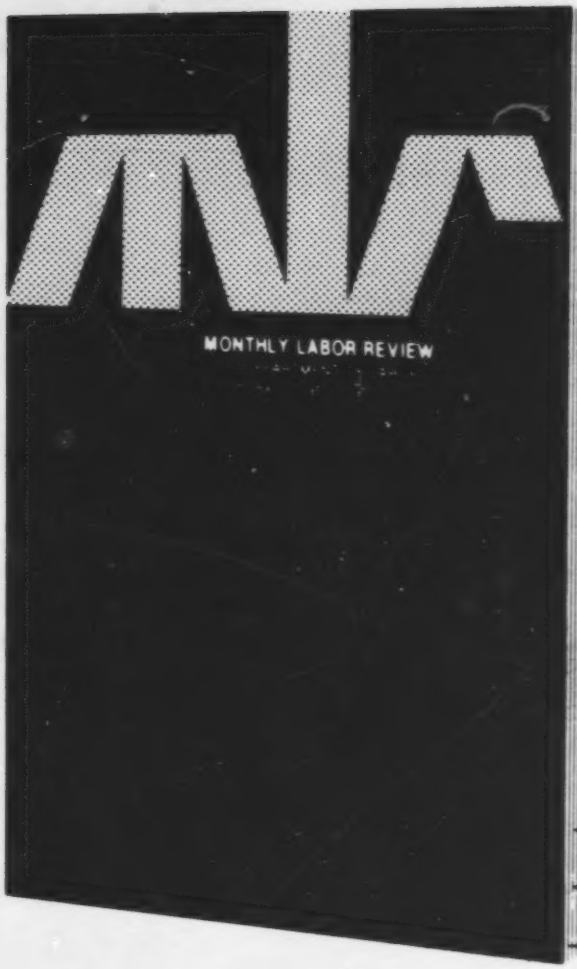

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